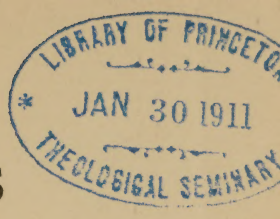


Division E 61

Section .D 39



THE PRIMITIVE ARYANS OF AMERICA

ORIGIN OF THE AZTECS AND KINDRED TRIBES

SHOWING THEIR RELATIONSHIP TO THE INDO-IRANIANS AND
THE PLACE OF THE NAUATL OR MEXICAN IN THE
ARYAN GROUP OF LANGUAGES

✓ BY
T. S. DENISON

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DEDICATION

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CONTENTS

	PAGE
INTRODUCTION	7
CHAPTER I	15
Importance of Indian languages.—Various learned opinions.—The numeral "Six."—The Mexican language—Age, affinities, origin.—Place of Mexican in the Aryan group.—Kinship of languages shown.	
CHAPTER II	22
Methods of working.—Ancient forms—Cow—Sheep.—Consonantal equivalence and vowel genesis.—Meanings, their importance.	
CHAPTER III	26
Roots—General definition.—Cow, bite, dog, sweat, elbow, ox.—Indra.—Analysis.	
CHAPTER IV	31
Roots.—Dictionaries.—What is a root?—Differentiation.—Different values of same root—Kul (kar)—Chichi.—Quetzalcoatl.	
CHAPTER V	38
Morphology of Mexican—Compounds, terminations, "liztli," the honorific "tzin."—Postpositives—L and r.—Clipped words.	
CHAPTER VI	47
Mexican word-studies—Tlani, Quechtli, Tzontli, Xauani, Ualyolcatl, Pixquiti, Tlacatecolotl, Metztli, Tezcatl-ipoca, Youalehecatl, Quauh-chimalli, Ozomatli, Mexico.	
CHAPTER VII	56
Mexican syntax—The prepositive objective pronoun—sequence in sentence—Age, syntax as evidence of, connectives—Coalescing pronouns—Conjugation—Desinences.	
CHAPTER VIII	64
The pronoun "tla."—"In," its use and history.—Grammatical gender—"Animate" and "inanimate."—Dialects.—Thought forms and style.	
CHAPTER IX	71
Individuality of languages.—Inflection.—Accent and rhythmic swing.—Repute and disrepute of words.—Ancient versus modern syntax.	

	PAGE
CHAPTER X	77
Classification of languages as to thought form.—Incorporation—Agglutination—Monosyllabism—Inflection.—Conjugation of “speak” in five languages.—Reflections on the probable unity of human speech.—Persistence.—Phonetic changes.	
CHAPTER XI	91
Phonology.—General remarks.—Vowels.—Dentals.—Gutturals (the kg-q and kq-s sound shifts).—Vocalic consonants.—The place of Mexican.—Labials.—Line of descent and assimilation.—The saltillo.—Accent.	
CHAPTER XII	101
Notation.—The five base—Chica ce, 6.—Ten—The fifteen base.—System Aryan.—Hand counting.—Antiquity.	
CHAPTER XIII	108
History and geographical extension of Mexican.—Tribes.—Ruins.—Population.—Native records and historians.	
CHAPTER XIV	114
Origin of the Nauatlaca.—Evidences of language.—Uitzil-opochtli.—Oriental affinities.—Mythology.—Pre-Columbian discoveries.	
CHAPTER XV	123
Origin of the Nauatlaca.—Historical evidences—The migration—“Chichi”—The Tlacochealca—Meaning of Aztec.—The Aztlan myth and synonyms of Aztlan.	
CHAPTER XVI	134
Aztlan legend—Climate—The “ten” places of the “migration.”—Specific appellations.—Culture names.—Spelling of names.—Geographical and mythological names common to Mexico and Asia.	
CHAPTER XVII	151
Religion and mythology of the Nahua compared with that of Asia.—General remarks.—Religion of the Nahua composite.—Human sacrifice.—Fire-worship.—The blood sacrifice.—Izcalli, the resurrection.—The unleavened bread.—Winter solstice festival.—Rites of Mithra.—The descent into hell.—Aztec future states.—Nudity rites.—Immaculate conception.—The cross.—Prophecies of a Savior.—Confessional and absolution.—Baptism.—Births—Marriage—Burial.—List of deities common to America and Asia.	
CHAPTER XVIII	163
Civilization not indigenous.—The home land.—Learning and arts.—Domestic life.—Ethics.—Economics and government.—Cannibalism.—Nahua disposition and courage.—Influence of superstition on the conquest.	
INDEX	183

INTRODUCTION

The inertia of the human mind is a constant source of wonder to thinking people. Everyone can easily recognize a discovery after it has been made and thrust upon him by a *tour de force*, while very few even suspected it before. The question: Does a relationship exist between the languages of the New World and those of the Old World has been mooted for the past one hundred years. Professor Vater of Germany and Dr. Barton of Philadelphia made extensive researches in this direction with little or no success. Even Alexander von Humboldt himself, had his attention attracted to the Mexican word *teocalli*, a temple, and noticed its striking similarity to "theoû kaliá," Greek, "the house of God." But, apparently, Humboldt abandoned etymology and instead tried to identify Mexican chronological nomenclature with the zodiac and calendars of the various peoples of Asia, with indifferent results. Alonzo de Molina, who published his great Nauatl-Spanish "Vocabulario" in the City of Mexico in 1555, must have understood Latin as well as he understood Spanish. But he passed by such words as Mexican *pant-li* and Latin *pont-is*, without noticing their similarity, at least his Dictionary is silent on the subject. But comparative philology was unknown in his day.

Three hundred and twenty years later Rémi Siméon wrote his magnificent Nauatl-French Dictionary, based on Molina. It is a monument of scholarship and would be a credit to any language. This and other like work occupied him twenty years more or less, and yet he contents himself with suggesting, and this at second hand, a com-

parison between the Mexican verb *mati*, to think, and the Sanskrit *man* meaning the same. Other eminent philologists contented themselves with mere dicta on the subject of the relationship of the languages of the American Indians to the languages of the Old World, some of them to the effect that such relationship would never be shown. About 1766 there was published an essay by Maupertuis, a French scholar, to the effect that the serious study of barbarous tongues would result profitably in adding to the stock of human knowledge and in extending our conceptions of thought forms. Max Müller expressed himself to the same effect, but for some reason nobody seriously undertook the labor. Yes, one man, Don Vincente Lopez, of Montevideo, did go about it seriously and made some comparison of Quichua (Peruvian) with the Aryan languages. As I had never heard of his book until my own was well under way, and since I have been unable to find a copy of his work entitled "*Les Races Aryennes de la Pérou*," I cannot speak of its character more than I have already said.

These preliminary remarks are not made with the purpose of magnifying my own work or of disparaging the work of my predecessors, but to illustrate the inertia of the human intellect, already alluded to, and the difficulty with which mankind is finally persuaded in a new direction although the way be perfectly obvious. That I engaged in this work I owe to the attack of a painful and lingering disease. Furthermore, I should acknowledge here that everything save health favored my work, acquired linguistic knowledge, leisure, inclination. Beyond all these, I began on precisely the right language, as I believe. Had I begun on Algonquin or Tupi my work in all probability would never have been finished. In fact it is not yet

complete. Works on philology can be finished only by printing them.

I did not undertake this work with any preconceived theory. In fact for more than a year I had no other motive than the love of learning languages outside the Aryan group. I was not looking for "lost tribes" nor seeking to restore vanished continents. I belonged to no "school" of philology, ethnology, or archaeology. For me there were no dogmas or creeds, no historical or scientific hypotheses of any sort whatsoever, either to bolster up or to tear down. For these sins of omission I pay the penalty of being classed as an "amateur," but since this innocent word really means one who loves his work I am willing to accept it.

I shall undoubtedly be accused of rashness in suggesting daring derivations where greater scholars have been cautious. But this was not the place for hair-splitting discussion of cognates or vowel genesis. Where others have held back I have boldly entered, not from temerity and presumption but from necessity. He who would sail uncharted waters must take chances. Many tentative derivations and hypotheses were found to be wrong and cast aside. It was nearly three years and a half before I could positively derive *xiuitl*, grass, year. I have tried at all times to distinguish clearly between fact and theory. Doubtless I have retained some things as final which may eventually be found wrong. I am but a pioneer and others may improve my work. But I await intelligent criticism with calmness because my main proposition is unassailable, and it is this: *The Mexican language is Aryan in vocabulary and in verb conjugation.* Its *post-positive* system suggests Turanian (Accadian) kinship, but it is analogous to that of the Indo-Iranian dialects

descended from Old Aryan. In antiquity Mexican appears to lie between Sanskrit and Greek as indicated by both *vowels* and *consonants*. Mexican mythology partakes of the Aryan, Turanian, and Semitic.

I believe that all the American languages may be traced directly to the Old World, though I do not say they are all Aryan. I will give here a single word as an example to illustrate more fully this general statement. *Viç*, Sanskrit, to go in, settle; *veçā*, a house; *vic*-arage, English, a parson's house; *baili-wick*, jurisdiction of a bailiff; *ôikos*, Greek, a house; *uic*, Mexican, *vic*-inity, near to; *huasi*, Quichua (Peru), a house (from *vas*); *og*, *oka*, Tupi, a house; Natick, *neh-wēk*-it, those in his household; *wicki-wami*, Algonquin, wigwam, an Indian's *house*; *vic*-inus, Latin, a subdivision of a town.

The chief difficulty with those who have attempted to compare the American languages and races with those of other portions of the earth appears to me to consist in the restriction of their field. For example, an examination of the zodiac, however interesting in itself, could not prove conclusive. Falb's "Das Land des Inca" is a remarkable monument to patient investigation and scholarship. His identification of the Peruvian god *Chon* with *Vul-can* I believe to be firmly established, as are other things in his book, but his "gottheit" is not sufficient. Mythology at best is largely a matter of speculation and at times it descends merely to clever guessing.

If the Indians came from the Old World at any time within the last 10,000 years, their languages should retain sufficient vestiges to indicate the fact. To go back to the Ice Age is doubtless going too far.¹ The traditions of

¹Daniel G. Brinton (*American Race*) thinks that America may have been peopled from Europe by way of the north at a very early date. John Fiske (*Discovery of America*, Vol. I, p. 4) says: "But it is by no means probable that their [Indians]

Noah's Deluge, the vague traditions of strangers cast away at sea and driven by adverse winds to the American shore, the traditions of strange, bearded men supposed to be priests bent on proselyting, the *occasional words* having a resemblance to European words of like meaning, all these things while significant are not conclusive. The languages must be taken as a *whole* and not in *parts*, nor in any vague discussions of similes, parallel traditions, and doubtful allusions to events of a semi-historical character. If two languages can be shown to be identical in a large proportion of their *roots*, say from 30 to 40 per cent., and identical in the basic features of their *syntax*, then in my opinion their common origin or contact is clearly established even if 5,000 years have elapsed since their separation and in spite of the fact that all resemblance in the one may be buried under bizarre *formative syllables* and ancient thought forms, while in the other, antique features have been stripped off by the attrition of modern life and the analytical character of modern thought.

This book has been a *development*. It has occupied nearly five years with unremitting labor. Groping my way at first, finding myself frequently wrong, and again

migration occurred within so short a period as 5,000 or 6,000 years." "Is most emphatically a native and not an imported article" (p. 20). "In all probability he came from the Old World at some ancient period, whether pre-glacial or post-glacial, when it was possible to come by land" (*ibid.*). Professor Fiske says further, commenting on Dr. Cyrus Thomas' "Aids to the Study of the Maya Codices," "it is becoming daily more evident that the old notion of an influence from Asia has not a leg to stand on" (*op. cit.*, Vol. I, p. 132, note). Also, "it [Mexican culture] was an outgrowth of peculiar American conditions operating on the aboriginal mind" (Vol. I, p. 147). I have quoted Fiske at some length because he fairly represents the attitude of most late writers on this subject. Also see A. H. Keane, *Encyclopaedia Britannica*, "Yucatan," and "America owes nothing to the Old World after the Stone Ages," *Ethnology*, p. 345. On the contrary the Mound Builders are reckoned as no more than barely pre-Columbian. In my *Mexican in Aryan Phonology* I have shown Nautl to be Iranian and in important respects identical with Zend as it was spoken in Western Asia 3,600 years ago. Truly Prescott spoke well when he said the word "probably" should be conjoined with most assertions of a historical nature.

unduly elated over "finds" which proved later to have little or no value, I received no *aid* whatever. Though I sought advice from philologists, it was for various reasons declined. One learned "linguist," however, discussing some preliminary work, took some pains to show that I must be a very ignorant person. His extraordinary conclusion was that "not a single one" of my derivations would stand the test of scientific analysis, which was a little worse than I could say of his criticisms, since *some* of them happened to be just. Another philologist speaking in a semi-official capacity took a shorter cut, he flatly condemned *without reading my paper!*

Most of this work has been rewritten four times, but long experience in the making of books warns me that where so much is attempted some errors must inevitably be found in spite of innumerable revisions. For these I ask the indulgence of the public. In consequence of my book's having thus been as it were a growth, a few things remain which possibly may not be supported by the whole. I have indicated them in every case by means of notes or by a modifying phrase and left them as perhaps not uninteresting landmarks of my progress.

Some of my references are inexact for the following reasons. I began this work because a lingering illness incapacitated me from the active pursuit of business. My motive was solely to pass time in the agreeable work of studying another language. My study of Mexican interested me in other Indian languages, but it was some time before the idea of *comparison* occurred to me. Meantime I had been making notes rather carelessly, sometimes omitting volume and page. This is why I occasionally fail in exact reference or perhaps give no reference. But it is impossible for me to go back now and plod wearily through

a vexatious verification for something which after all is not of the first importance. I believe the ordinary reader seldom bothers his head with notes, though here many good things are found in the notes. The philologist will have little difficulty in finding what he wants without much guidance from me.

In laying down my pen I confess to a certain sense of disappointment. The result hardly seems commensurate with the labor. For a time I hoped that I had discovered a very ancient language that might throw more light on the original speech of mankind, but finally it came to this, that I had simply added another tongue to the Aryan group. But if I have broadened the geography of Comparative Philology, I am satisfied.

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163 RANDOLPH ST., CHICAGO
September 10, 1908

CHAPTER I

Importance of Indian Languages—Various Learned Opinions—
The Mexican Language, Place of Mexican in the Aryan
Group—Kinship of Languages.

About the year 1766, Maupertuis, a French astronomer and mathematician, published a treatise on the origin of language. He emphasized the importance of studying the languages even of the most distant and barbarous tribes. In his opinion a critical examination of their "thought-forms" might give the world a new philosophy of language. His suggestions, however, did not meet the approval of M. Turgot, one of his contemporaries, who professed not to understand them.¹ Very important results might have followed a friendly acceptance of the suggestions of Maupertuis by philologists.

The white man has always considered the Indian as belonging to an inferior race, and has, in consequence, been somewhat indifferent to his language and his civilization. To a majority of the white race the Indian was once but little more than a wild beast to be robbed or killed at the pleasure of his more elevated and civilized brother. His language was popularly supposed to consist of a series of grunts and exclamations, pieced out with gesticulations, a barbarous jargon without nicety of structure, or the power of extended expression and continuity of thought.² It is not to the credit of the American people that they have allowed the Indians to perish from

¹ Henry R. Schoolcraft, *Indians of North America*, Vol. II.—[Maupertuis died 1759.]

² For a refutation of this nonsense, which has been held sound by some very respectable people, see Howse, *Cree Grammar*, Preface.

the land without a more discriminating study of their languages, customs, and institutions. The Spaniards, in spite of their avarice and cruelty, have done better. But they came in contact with civilized Indians, and, to the shame of the Castilian, be it said, he ruthlessly destroyed the records and the monuments of two or three flourishing civilizations, little knowing or caring what he did. Of course there was a political method in his madness.

For a long time the study of the Indian and his speech languished, but of later years much has been done. Fortunately it is not yet too late to solve the problem of the origin of the Red Man as recorded in American languages.¹ Exactly twenty years ago William Dwight Whitney of Yale, an eminent philologist, wrote as follows: "It ought to be evident to everyone accustomed to deal with this class of subjects that all attempts to connect American languages as a body with languages of the Old World are, and must be, fruitless; in fact all discussions of the matter are at present unscientific, and are tolerably certain to continue so, through all time to come."²

Professor A. H. Keane says: "Science has demonstrated beyond all cavil that, while differing widely among themselves, the American languages not only betray no affinity to other tongues, but belong to an absolutely different order of speech."³

A German philologist recently expressed to me personally this same conviction as embodied in Professor Whitney's statement. Alexander von Humboldt was of

¹ The number of Indian languages has been variously estimated: Adelung, 1,264; Ludevig, 1,106; Squier, 400. The American Bureau of Ethnology estimates the number of *groups or families* at 100.

² *Encyclopaedia Britannica*, article "Philology."

³ *Encyclopaedia Britannica*, article "Indians."

like opinion regarding the affinities of the Indo-European group. Max Müller says: "To attempt at present to trace them [the American languages] to a Jewish, Chinese, Phoenician, or Celtic source is simply labor lost and outside the pale of real science."¹

Professor Theodore Nöldeke of the University of Strassburg remarks: "It must be remembered that it is only in exceptionally favorable circumstances that cognate languages are so preserved during long periods as to render it possible for scientific analysis to prove their relationship with one another."² I think he puts the case too strongly, and the isolation of the American languages has furnished exactly the conditions described by the professor as exceptional, but philologists have ignored these conditions and confined themselves to dogmatic assertions not warranted by their knowledge of New World tongues,³ and this while their profound studies of Old World tongues deserved the greatest praise and excited the admiration of scholars in all departments of learning.

Professor Nöldeke cites the numeral *six* as an example of a deceptive root which may lead the incompetent or rash philologist astray by its close resemblance in several languages which cross families, that is, belong to groups but little related according to accepted classifications. Thus: Hebrew, *shesh*; Sanskrit, *shash*; Modern Persian, *shash*. Professor Nöldeke says the Indo-European root is *sweks* or *ksweks*, while the Semitic root is *shidth*, which he asserts to be a wholly different root. By pure analysis and reasoning, it would perhaps be equally impossible to

¹ *Science of Language*, Vol. I, p. 452.

² *Encyclopaedia Britannica*, article "Semitic Languages."

³ "In Tartary, 4,000 years really makes no changes in words," Joseph Edkins, *Congress Orientalists*, 1893, Vol. II, p. 670.

establish his proposition or to disprove it. But in language, one living, virile expression or phrase upsets a chapter of theory, and the cases of absolute identity of form in such comparisons are so rare as to cut no figure, and would lead no real investigator astray. Professor Nöldeke might have added the Mexican *chica*, a possible **kiks* but not in fact, which is the increment sign between five and ten. Thus, *macuilli*, a "hand grasp," five, but six is *chica ce*, that is, simply "plus one," five being understood. *Chica* is the Sanskrit *adhika*, plus or redundant, thus *ashtādhikanavati* is literally $90 + 8$. With *adhikanavati*, compare Mexican *chica nauī*, nine. But finally, Professor Nöldeke's **ksweks* might, I think, be Semitic *shidh*, the sibilant descending from a guttural which is regular and common, and the dentals from palatal *k* which is not so likely.¹

In spite of all these opinions from really learned men whom I greatly respect, I insist that analysis and comparison are better than theory. I may add here that stray waifs of a universal language may be found everywhere. If this happened but a few times it might be attributed to coincidence, but it continually happens. (See footnote, p. 88, on Khassi.)

The Mexican language.—The old distinctions, Indo-European, Semitic, Turanian, acquire a local significance when there is introduced to the world a language older than Sanskrit, and to all appearances, much like Zend of 3000 B. C. The Mexican language, better known to philologists as Nauatl (Nahuatl), is, in vocabulary pure Aryan.² It probably had its origin in the highlands of East Iran, the country of the Elamites, thus its primal

¹ *K* and *t* are interchangeable, *Grammar of Awabakal*, by L. E. Threlkeld.

² If there be such a thing as *pure Aryan*. Over 40 per cent. of Greek is unassignable (Rendall). The same may be said of Latin.

seat was the Pamir country, "the Roof of the World." I shall not go into the origin of the Aryans here, but proceed directly to the specific matter in hand. Mexican is Aryan in its verb conjugation. Its pronominal system resembles Semitic with respect to the agglutination of pronouns, the conjugations are rudimentary Aryan, and the prepositive pronouns suggest Accadian (Turanian). While Mexican, in its vocabulary, is Aryan, some of its words appear to be found in Assyrian and some of its very oldest forms may be Accadian, while there are others in Púkhto which may be non-Aryan. It is of course possible that the Semites borrowed freely from the Accadians, who in turn may have borrowed from the conquering Semites. At any rate the two languages were both for a long time in use in Babylonia side by side, as is evident from the numerous bi-lingual inscriptions. Very much yet remains uncertain concerning Accadian, or, as it is latterly called, Sumerian.¹ In fact, so eminent an authority as Professor Friedrich Delitzsch denied the existence² of Accadian, and ventured the opinion that it will prove eventually to be neither more nor less than a hieratic gloss of the popular Assyrian. It is not my purpose to engage in the Sumerian controversy, but when words and roots are found current today on the plains of Anahuac which were in use on the banks of the Indus or the Euphrates 3,000 years ago, the question is pregnant and becomes one of patient research. Mexican occupies an intermediate position between Sanskrit and Old Persian, and in "thought-forms" establishes its claim to great age which is further supported by historical and mythological references.

¹"The Accadians were the Highlanders of Western Asia beyond much doubt."—A. H. Sayce, *Assyrian Lectures*, p. 17.

²*Assyrian Grammar*, by F. Delitzsch, section 25.

Place of Mexican in the Aryan group.—It will doubtless be said at once that language is no final test of race affinity. This is sometimes true, but I will add that language is almost the only thing which priests and politicians have never been able to affect seriously. The Mexican language is so primitive in vocabulary, structure, and "thought-forms," that if it has been produced by *contact* or the mingling of races, or by *conquest*, the fact was accomplished at a very remote period. Its *vowel system* closely resembles the *Avestan*. Hence if the Aztecs were not Aryan in race originally, their absorption by Aryans took place so long ago that for linguistic purposes we must call them Aryan. The postpositive system places *Nauatl* among the Pamir dialects, very primitive, and the modern Aryan languages of India, but the postpositive system is also Turanian.¹ I quote here, as à propos, a description of the *Ainu* of Japan. "The forehead is narrow and sharply sloped backward; the cheek bones are prominent; the nose is hooked, slightly flattened and broad, with wide strong nostrils; the skin is light reddish brown; eyes set straight in the head; hair for most part black and wavy; beard dark and handsome." The *Ainu* are said to be Aryans.² Cust describes the Galchas and the Dardui as pure Aryan stock and pre-Sanskritic. He thinks the Pamir region was the primitive seat of the Indo-Iranians.³ Why not of all the Aryans (see "Geographical Names," chap. xvi)? But Forlong radically disputes the entire theory of Aryan influence in India, and maintains that Turanians

¹ For the formation of postpositives and agglutination, see Professor E. W. Faye, *American Journal of Philology*, Nos. 60, 61.

² The *Nation*, "Notes," Sept. 12, 1907, and note, p. 88, *infra*.

³ Robert N. Cust, *Modern Languages of India*, p. 32.

have predominated in both language and civilization.¹ The question of *color* is also pertinent. Were there *red* Aryans? It is said on good authority, the Vedas, that the *Kshattriya*, warrior caste, were red, that they gave "the wisdom of India" to the white race, and that Buddha himself was a *red man*.² Their modern descendants are the Rajputs. The second Aztec "cycle" was the "Red Age." "The primitive Aryans were of light color, reddish or brown rather than black," says Mr. Widney.³

Kinship of languages.—It is my purpose to support these preliminary statements with about five hundred words, more or less, in a comparative vocabulary, which I deem ample to establish the linguistic unity of the New World with the Old.⁴ I do not pretend that the entire Mexican vocabulary may be derived from Old World languages. Doubtless there are words indigenous to the soil of America, and *per contra*, Aryan roots have been lost or so worn that direct proof of their origin is impossible and only analogy establishes their identity. I have examined about thirty languages in pursuing these studies, but shall attempt in this work to show the identity of but one American language, Mexican or Nauatl, with the eastern languages, though I am convinced that what I have done for the Mexican may eventually be done for Shóshone, Quichua, Tupi-Guarani, Maya, Algonquin, Dakota, Selish, and other American tongues.

¹J. G. R. Forlong, *Short Studies in the Science of Comparative Religions*, p. 248.

²Charles Johnson, of the Bengal service retired, in a *Letter to the Nation*, August 20, 1908, concerning his translation of the *Bhagavad Gītā*. Also *Encyclopædia Britannica*, Vol. XII, p. 782.

³*Race Life of Aryan Peoples*, Vol. I, p. 27.

⁴Physical infirmities have prevented the revisions necessary before publishing such a vocabulary. But ample proofs are found in my monograph *Mexican in Aryan Phonology*.

CHAPTER II

METHOD OF WORKING.—Ancient Forms —Cow, Sheep—Consonantal Equivalence and Vowel Genesis—Meanings

Any explanations of my method of research would be superfluous in the case of the trained philologist, but as this work is intended for general use among educated people, I may be excused for presenting here a few general directions for the guidance of the reader. First of all, let us remember that *vowel* mutation is very important, though the causes of change are not so easily traced as in consonant mutation which usually takes place under very definite principles of change.¹

Cow.—The Sanskrit root *go* (gau) means *cow*. How small the change in 5,000 years. The Sanskrit *g* has advanced to *k* in English; the Greek is βοῦς (bo); the Latin *bos* or *vacca*. The Mexican for cow is *quaquaue* (pronounced ka-ká-way). Note here a curious thing. The Aztecs had no cows. The animal, if known to them, could have been known only as the bison (*bos bubalus*), but their name for cow is doubtless a reduplication of the Sanskrit *gau*, or *ga-ga*, with *e*, a possessive ending. Now, how did they manage to retain this name for several thousand years intact, supposing that for a long time they were strangers to the animal? This may be explained if we assume a borrowed Assyrian root, though it is doubtful

¹In this connection read the phonetic mutations in chap. xi, "Phonology." Vowel mutation takes place under well-known definite rules in the Aryan languages. I ask the reader who is not a linguist to accept my statements as authoritative. I refer the philologist to my *Mexican in Aryan Phonology*. Max Müller says every vowel in the languages of Europe is exactly what it ought to be. If he means according to *rule* the statement is too strong.

if such assumption be sound philology. The root *ka* once meant any projecting, prominent feature or object as a horn of a cow, a pole set in the ground, and even the human hand. The Accadians used it 5,000 years ago, and the Assyrians much later in the same sense. (See *ka* in Norris' *Assyrian Dictionary*.) Hence, if no Aztec had seen a cow for thousands of years, it would be in keeping with the genius of his language, to resort to the old name. But I do not maintain that this actually happened, since the stag was called *mazatl* instead of *quaque*. In the Ioway language the root is *cae*; to-*cae*, bull; *cae-me*, cow (buffalo).

Sheep.—I will cite here curious facts in the history of a word which is at once peculiarly instructive and historically interesting. Under the article "Mexico" in the *Encyclopaedia Britannica*, the author (E. B. Tylor), discussing the ancient Aztecs, eulogizes their piety as exhibited in a prayer which he quotes. The worshiper calls the attention of his god, Tezcatlipoca, to his having sacrificed a sheep to the deity. The author concludes that the prayer had been tinged by Spanish influences because no such animal as the sheep was known to the ancient Mexicans. *Ichcatl*, sheep, is *chága*, goat, in Sanskrit; *skeap*, sheep, is Anglo-Saxon; *schaf*, German. The phonetic changes here are: root is **skag*, Mexican **i-skag* = *ichcac-tl*.¹ The final *c* is dropped giving *ichcatl*. In Germanic final *c* becomes *p*, hence *skeap*. The prosthetic *i* is common in Zend and Iranian generally. Such vowels have been termed "irrational." The only puzzling question is, why did the transfer of meaning take place from sheep to goat. Perhaps it was the Aryans of Asia who made the transfer to goat. At any rate the Mexicans

¹ An asterisk preceding a word indicates a restored or hypothetical form.

appear to have had a word for sheep always, and in the prayer alluded to, a wild sheep may have been meant, though it is not at all improbable that the prayer may have been altered by Spanish hands.¹

Remember, too, that the termination *tl* cuts no figure in the solution. I may add that there is another derivation for *ichcatl*, which also means *cotton*; Mr. Tylor derives it from *ichtli*, thread, and sheep is "thread thing," which is phonetically impossible, as shown by the cognate *ic-patl*, thread, where the soft *ch* reverts to hard *c*, but *ich-tli* may be the same as Sanskrit *ish-u*, a string.²

Consonantal affinity and vowel genesis.—The equivalence of consonants is perhaps at once the plainest and safest guide in making comparisons. To stray from this fixed principle is to err. There are some very strange exceptions, however, and the most notable perhaps of all is that by which an original *g-k* becomes *t* in one language and *v*, *p*, or *f* in another. For example, Sanskrit, catúr, four; Greek, téttares; Welsh, pedwar. But vowel mutation is also exigent and must not be disregarded. But this subject is fully discussed in chap. xi, "Phonology."

Meanings.—Meaning is fully as important for purposes of derivation as the proper genesis of letters, possibly it is even more important sometimes. The only thing absolutely immortal is thought, and words are the

¹*Encyclopaedia Britannica*, article "Mexico." In fact the bones of *Ovis Canadensis* have been found in Arizona ruins; *Smithsonian Report*, 1900-1, p. 27.

²In this book I shall constantly refer to the Sanskrit. A reference to that language takes precedence over all others. But let it be understood once for all that I am not deriving Mexican words from the Sanskrit directly. The Sanskrit possibly possesses the most ancient literature to which we have access; at any rate, it is very near the Mexican, and for that reason, takes precedence. If the reader neglects this caution, he may at times misconstrue my meaning. The same caution applies to all other languages. For example, should I associate, *petla*, to peddle, with English peddle, I mean simply that both may come from a common pre-literary root, the connection to be proved by cognates or otherwise.

long-enduring, almost indestructible symbols of thought. When one looks into a Sanskrit dictionary and finds that *lubh*, 4,000 years ago, meant *love*, as it does today, that *bhar* meant *bear*, and *gau* meant *cow*, it is a matter of surprise that mere words may be imperishable. It is in fact almost certain that when the meanings of two words identical in form differ radically that they are in no way related.

Even slang may teach us concerning language. The persistence of "thought-forms" is simply marvelous, and when words perish the same idea-mold will receive new words and the idiom appears to live forever. I remember having heard as a boy, among my native hills, the common expression "old rip," used. I looked upon it as simply slang. I cannot prove descent but I believe in it. The expression cast a mild sort of obloquy upon one not deemed bad enough to be designated as an out and out rogue. The Sanskrit root-word *rip* and its affiliated root *lip* mean cheat. Hence, to call a person a "rip" is really to call him a cheat and "give me none of your lip" is doubtless near akin to it, though appearing to have a very different origin.

There is a deviation of meaning, however, which is allowable arising from figures of speech, where simile, metonymy, synecdoche, cause *transfer* meanings like sheep to goat, sister to daughter, or *extensions* like house to family and vice versa, but leave no doubt of the original signification, but even here, the careful philologist rejects all that appears doubtful.

CHAPTER III

Roots.—Cow, Bite, Dog, Sweat, Elbow, Ox, Indra—Analysis.

Roots are the basis of philological research. Roots originally may have consisted of but two letters or even of but one. In Tupi, words frequently consist of a vowel, and *e*, for example, has nearly a score of meanings, which are differentiated by prefixes and affixes, and *i* is a root, to go, in Sanskrit. In Chinese many words appear to consist of but two letters, a consonant and a vowel; in fact some claim this to be a rule of Chinese. A compound consonant like *ch* or *ts* is counted as a single consonant. The most common form of Aryan roots appears to be: consonant + vowel + consonant, as *vat*, to know, reveal. But *vañc*, totter, while appearing to be exception, is really a tri-literal root strengthened by *n*. The *n* does not appear in Latin where we have *vac*-illare, totter, English *vac*-illate. Bear in mind this strengthening which occurs frequently in Sanskrit and Greek. This will explain the frequent disappearance of *n* in comparisons between Mexican and Sanskrit words. Thus *man*, to think, becomes *ma-ti* in Mexican, but retains the *n* in the English word *mind*. Tupi roots, like *e*, may simply have lost their consonants. Sometimes what appears to be a simple root is really a compound or extension as Sanskrit *yudh*, to fight which = *yu* + *dhē*; Mexican, *yao-chiua*.

Cow.—Very few words may be traced back wholly unmodified for any great period of time, but roots are of great antiquity. I have already mentioned the word *gau*, *cow*, as an example from the Sanskrit. But the Greeks

employed *boû-s* (*bos*). Why was this? *Bou* may be derived from *gau* by means of an intermediate parasitic *v* (*gva*), but *bou* may also have been an original root. In *nyl-gau* we have the root in a compound, "blue-cow."

Bite.—The investigator does not always find his work so easy, as in the examples named, which are simple. Often but a small portion of a root can be traced in a word, or the whole is so transformed as to be unrecognizable. Sometimes only a single letter remains, and some obscure dialect proves the original. For example, German *beissen*, to bite, is in Mexican *ouit-ic*, bad, unfortunate, English, bitten; Sanskrit, *bhīd*.

This was my first derivation, but I find that Forlong derives a word from an old root which appears to be pre-Aryan, *bōd*, *būd*, *bhūd*, Tibetan *bō* and Chinese *fō*. He connects it with Sanskrit *bhūtā*, from *bhū*, to be, exist, hence a created being and specifically an *evil spirit*, our English *bogy*. The word was Turanian and is the Russian *Bog*, god, Iranian *Baga*. He does not explain the intrusion of the guttural *g*. In Mexican *b* becomes *u*, hence *ouitic* bad, *oui*, dangerous, are more probably derived from *bhū* than from *bhīd*. This root is wholly distinct from Buddha the name of the Sage.¹ (See p. 152.)

Dog.—The names cow, sheep, dog, are naturally among the oldest in any language and dog is especially ancient. In all probability, the dog was a companion of man at the very beginning of civilization. He was even a "sacred" animal. The oldest extant words for dog are formed round a *k*-stem. The Sanskrit name is *çvan* (*ç=k* or *sk*); the Greek, *κύων*; the Latin, *canis*; the German, *hund*; the English is specialized in *hound*. By reference to the

¹Cf. *Mexican in Aryan Phonology*, p. 15, and Forlong, *Short Studies in the Science of Comparative Religions*, pp. 234 ff.

chapter "Phonology, gutturals, eastern and western," it may be seen that Sanskrit *k* becomes *h* in Germanic tongues. This leaves the English word *dog* out of the discussion, which will be confined to the original word with a *k*-stem. The Mexicans have two words for dog, *chichi* and *itzcuintli* or *izcuintli*. The latter is the usual Aryan word, but in Panjābi we find *kutta*. The compound consonant *tz* stands for an earlier *s* and the *i* is only a prosthetic glide very common in Zend, Old Persian, and Mexican;¹ *tli* is the termination which may always be ignored. Hence the original root may in prehistoric times have been *skun* instead of *kun*.² The Sanskrit *ç* has a unique value. Derived from an original *k*, this sound remains *k* in some tongues and becomes *s* or *sh* in others.

My object here is twofold: first, to bring my methods of working, in a few examples, so clearly before the reader that he may learn to distinguish disguised forms; second, to establish the fact that these words of extreme antiquity clearly show the Mexican to be in accord with other Indo-European tongues, or more explicitly an Aryan tongue.

Sweat.—On the authority of competent scholars, the statement is made that all the Aryan peoples have the common word *sweat*, which might indicate that the race originated in a warm climate. The Sanskrit root is *svid*, Greek, ἵδως *σφιδως, Latin, *sudor*, and, curiously enough, these American Aryans of Mexico have the verb *itonia*, to sweat. If we concede the decay of an introductory *sv*, then they would be in accord with the Old World members of the family in **svid-onia*. This is analogous to ἵδως *σφιδως, but the root is probably *ton-a*.

¹ See "irrational vowels," *Mexican in Aryan Phonology*, p. 11.

² Later I find that the Snake dialect of Shóshone actually has what may have been an *sk*-form in *sharay*, dog, and in Clallam, a Puget Sound dialect, *dóg* is *ska-ha*. Compare *skye-terrier*. "Clallam differs materially from the other Puget Sound Selish tongues" (Gibbs).

Elbow.—Two or more roots may be used as the base of a vocable, verb or noun. In Sanskrit and Mexican bare roots may be joined into compound words. The Mexican name for elbow is *molictli* or *molicipitl*. *Molictli* = *mol* + *ic* + *tl*. *Mol* is the Aryan root *mṛ* in Sanskrit, to crush; Latin, *mol-a*; Greek, *μύλη*, a mill; Anglo-Saxon, meal, and *mol-de*, crushed earth. This root also meant “mill” in the sense of a fight as it does today. The root *īṅkh* (*ik*) means to move unsteadily (back and forth) in Sanskrit. Omitting *n* and *h* as explained, pp. 26, 97, we have Mexican *ic*, and *molictli* is “the mill mover,” in allusion to the movements of the elbow in grinding on the ancient hand mill. *Pitl*, may be derived from *pīd*, to press upon, or possibly from *piṣ* which in itself means, to grind, crush, mill. *Molictli* may also be derived, perhaps more directly, from Avestan *meregh*, rub, wipe. Finally, as an “extended” root, *molictli* may be derived from *mṛj*, to rub, to milk. These ideas are all closely akin.

Ox.—The word *ox* originally meant *bull*, from Sanskrit *ukṣ* or *vakṣ*, “the sprinkler.” A secondary form was *uj* or *ug*, to wet, from which we get the word *hygrometer*, an instrument to measure humidity; Latin, *uven*, **ugvens* *coelum*, the dripping sky; Gothic, *auhsa*, a bull, hence English, *ox*; German, *ochse*. The old Aryans also employed this word as embodying the idea of virility, power. The Mexican is *oquichtli*, male. It will be remarked that this latter word expands the root into two syllables, *og-ich* (*okish*), instead of the Sanskrit *ukṣ*, and a similar strengthening of roots also occurs in Zend.¹ *Oquichtli* in Mexican is the sign of the male gender as: *oquich-mazatl*, a buck; *cihua-mazatl*, a doe.

¹ See Tolman, *Old Persian Inscriptions*.

Indra, the name of a Vedic god, has never been satisfactorily derived. I offer the following solution. The Mexican particle *in* has practically the force of the article *the*. It is always independent or detachable in Mexican and had the same use in Old Persian.¹ Hence *Indra* may be analyzed: *in* + *dra*, "the dra." It remains to find the special meaning of *dra* which does not concern us here. The Mexican god *Tlaloc* is certainly *Indra*, since in Sanskrit *Indralokā* means *Indra's* place, that is, heaven. *Tlaloc* is plainly [in-] "tla-lok," god of the Terrestrial Paradise, the giver of rain, so was *Indra*, and patron of farmers. *Tlaloc* is no doubt a *transfer* meaning from *place* to *lord* of the place. *Tlaloc* was the only Mexican god who had a *court*; the instrument of his vengeance was the *thunderbolt*—all of which suggests *Indra*.²

Analysis.—It is sometimes not easy to determine the root in long compound words such as occur in most Indian languages. For example *notlazocniuhitze* means "my beloved and honored friend," of which *no* is the pronoun *my*; *tlazo* is clipped from *tlazotla*, love; *icniuhitli*, friend, becomes, by elision of *i* and clipping off the termination *tli*, simply the mutilated fragment *cniuh*; *tzin*, honorable, is reduced to *tz* which combines with *e*, the sign of the vocative case. *Temachtiani*, a teacher, is resolved into *te*, some one, *mati*, to think, which becomes *machtli* in the dative form, and *ani*, a termination meaning "one who" (does).

¹ See the phrase "*in Susinak*," p. 66.

² The eight *Tlalocs* were beyond doubt the Vedic eight *lokapālā*, "world protectors."

CHAPTER IV

Dictionaries — What Is a Root? — Differentiation — Different Values of Same Root: — “Kul,” “Chichi,” “Quetzalcoatl.”

To accomplish anything positive and definitive, philology should, to use a mining-phrase, reach bed-rock. That is in many cases manifestly impossible. But philology must dare or else forever remain a stationary science. Far be it from me to say aught in criticism of the illustrious linguists who have gone before me and whose ripe scholarship in many cases far exceeds any acquirements of mine. I would not pluck a single leaf from their laurels. They laid the foundations for greater work, and it is for the future to utilize their labors, without which nothing could be done. It were invidious to select any particular names for mention from out this army of patient, persevering men who have prepared grammars and dictionaries of nearly all the known languages of the world, if not all of them in fact. The patient student who has at hand a magnificent library and behind him the prestige of a great university may, and often does erect a monument to scholarship. But he could accomplish nothing if he had not ready at hand the results of the pioneer's work, crude as it often is. It is safe to say that philology owes more to religion and the Christian missionaries, from the learned Jesuit father to the humblest preacher, than to all other causes put together, but one thing is to be greatly regretted. The natural bias of the minds of these men and the oneness of the trend of their thoughts, diverted them from anything like applied science in the study of

languages. They set down faithfully what they heard and saw, but they seldom illuminated it by a spark of reflection.

Our dictionaries are good, and constantly growing better, but what the world needs now is a great comparative dictionary, which shall include every word (of common use) in not less than twenty-five of the principal representative languages. No pretentious dictionary of the future should content itself with repeating parrot-like merely the Romance, Germanic, Sanskritic, and classic equivalents. They are so similar in form, in many cases, that their repetition is not worth the space consumed. French or Italian would answer for all Romance, and German for all northern languages, resorting to other dialects only for words not found in these. Roots should be given for common words in all these representative languages. The space wasted in superfluous detail under the present system would accommodate the full derivations for say 3,000 common words, a sufficiency for all practical purposes; a number which in fact would cover the whole field. Such a dictionary would enable the comparative philologist to take up his work without the endless and onerous work of collecting materials.

What is a root? But firstly, accurate scholarship must determine the roots of the world's languages as carefully as it has been done for the Aryan tongues. This will involve an enormous amount of careful research and patient labor. In fact we may not hope ever to be sure of all or even a moiety of the roots in primitive human speech. Language was at first doubtless a formless sort of thing, which perhaps may be compared to the jelly fish in the animal kingdom. In these remarks I have in mind only definite, formed human speech however crude it may have

been, language with a considerable vocabulary and "thought-forms" of definite mold, sufficient to differentiate its vocables and prescribe its syntax. Eminent philologists hold to the opinion that a few hundred monosyllabic roots would adequately include the primitive tongue, admitting for the sake of argument the unity of mankind.¹

When is a vocable proved to be a root from the common or mother tongue? When you can show identity or adduce collateral evidence from several languages widely separated in time and geographical distribution, it is safe to say that you have found such a root. If such proofs are lacking, the supposed root may be local. It is true there is much borrowing done between languages. But the Arab, for instance, has not had any opportunity to borrow from the Eskimo, not for some thousands of years at least. An identical root (phonetic changes considered) with practically the same meaning in both these languages would constitute presumptive evidence of its common origin. Such a work as I have described could be prepared only under the patronage of some great institution with sufficient stability and resources to carry it through to a finish. The results would surely justify the expenditure of time and money.

It is also true that two primitive peoples may occasionally have independently hit on the same word for the same thing. "*Kaw-kaw*" might mean *crow* anywhere. Hence might spring a root, *caw*, to croak, to chatter, to mock, etc. This would be true of the small class of imitative or onomatopoeic words such as *cacalin*, a crow. The Mexican, chichi *uaualoa*, the dog barks, furnishes a fine example. Compare *ha-ha*, to laugh, perhaps once a guttural, *kha-*

¹ Max Müller, "Rede Lecture," *Chips from a German Workshop*.

kha, with Sanskrit *jask*, to laugh, Mexican, *uetzca*, *ghatska, Latin, *cac-chi-nare*.

Max Müller roughly estimates the number of original roots at 500. But some philologists discard entirely the idea of primitive roots. Professor Keane says: "Roots must be relegated to the ante-Cosmos."¹ I cannot agree with him. Throughout the vast Aryan territory, from the Indus to Anahuac, we can, no matter under what guise or what dress of formative syllables, always trace a phonetic *unit* and that *unit* we call a *root*. Professor A. H. Sayce is of the opinion that the sentence is the *unit* in human speech. In a qualified sense, and applied to languages already developed, this may be true. It seems obvious that it could not have been true of the first crude beginnings of articulate speech, unless we consider exclamations, such as *hark*, to be complete sentences.

Differentiation of roots.—There must have been some confusion and overlapping of meanings in the primitive days when monosyllabic roots reinforced by signs and gestures constituted language. New meanings were needed and new vocables were necessary to piece out the limited capacity of existing roots. As we have seen, particles like *er*, *ly*, *ty*, were tacked on, while *n* became an infix, thus constituting words.² Finally, long, clumsy compounds were formed which embodied in themselves whole phrases or sentences like the Sanskrit: *sakalanitiḡastratattvajña*, all-behavior-books-essence-knowing. Such phrases constituted adjectives or adverbs. In Quichua they are as formidable as in Sanskrit. Modern

¹A. H. Keane, *Ethnology*, p. 207 ff.

²Some philologists insist that in comparison both *root* and *termination* must rigidly agree. But this is straining a point. I think for practical purposes the terminations may be disregarded, as a rule. For example: *κύων*, Greek; *can-is*, **kʷanis*, Latin; *hun-d*, German; *itzcuin-tli*, Mexican.

syntax reconstructs such clumsy locutions into subordinate clauses.

The American languages are celebrated for long words consisting of anywhere from ten to twenty syllables. Nor are they an awkward jumble thrown together clumsily. They are dovetailed with nicety as a rule, though Mexican is at times a little cumbersome. They are built up from roots or words with precision and capable of a meaning at once extended but direct and pointed. But let us not be deceived by the amazing words constructed by missionaries and traders for the delectation and admiration of the unsophisticated. Wonderful things may be done in that way in German and modern Greek, and nothing could be much worse than some of our English words.¹ Indefatigably is a pregnant example, a cacophonous word with a broken back, and its primary accent four syllables from the end. It is simply barbarous. The following word is given as a sample of one of the very longest words in the Mexican vocabulary, *tzontequilicatlatquicaualtia*. Translated in the same order as the original it is "judgment-[give]-and-goods-restore-do." "Give" has been inserted; it is not necessary in the Mexican. The whole means to render judgment for return of goods in an action in trover. O-an-quin-tlaecoltia is a complete sentence, "you them have obeyed." But Mexican can be simple. Compare *etl* with English *bean*, and *calpolli*, tribe, with *cosmopolitan*, its cognate.

Different values of the same root.—Any inquiry into the exact form of the most primitive roots of articulate

¹ The following clipping exactly illustrates the case: "A young German matron once said: 'Ach, how glad I am that my dear Fritz has been appointed Hauptkassenverwaltungsassistent'—assistant cashier. 'Now,' she went on, 'in my title of Hauptkassenverwaltungsassistentin I boast five letters more than that proud Oberhofsteueramtsinspectorin'—excise inspector's wife—'can claim.'"—*Philadelphia Press*.

speech would under the most competent hand be perhaps futile and mere speculation. For the sake of illustration assuming forms so elementary as *ka, ak, ba, ab, pil, apil, ko, kon, pa, pat, at, ap, mac, map*, there is under the law of permutations, room for almost numberless changes of form as these bits of speech are tossed on the restless sea of human thought. The wonder is, that anything has been definitely fixed. It is to be kept in mind that language is purely arbitrary. There are many anomalies which defy logic and elude analysis. The Sanskrit demonstrative *sas* might become *sa*, euphonically, *so*; Greek, *ὁ, ὃ*; Mexican *ce*, one? In the oblique cases the word assumed a *t-form*, as *tám, tát*, English *that*. The German *knabe*, boy, may once have been *k^enabe*; clan, **k^elan*, from the Irish and Gaelic *clann*, appears to be at home in English as a terse, expressive root. I say it *appears* to be for the following reasons.

Kul.—The old Aryan invaders of India clung together closely, probably for three reasons, family pride, patriotism, and self-defense, since they were hated conquerors in the midst of a partially subdued alien race. In Sanskrit *kula* meant swarm, family, kin, tribe. The Mexican says “*incal in no-col-huan*,” the house of my ancestors, literally, “my ancestors, their house.” The Scotchman is very clannish, even yet. When an individual of the genus “sport” meets a chum he may greet him as “cully,” and the other may in return greet his friend with the doubtful word “pal.” Step by step these once honorable words have reached lower depths. The Scotch clan, **k^elan*, was almost certainly once *kulan*, identical with Sanskrit, *kula*; Sioux, *kola*; Mexican, *colli*; Panjabi, *kul*, family; Quichua, *kolla*. The Mexican is used only in compounds, but is the same root,

no matter who may have originated the word. The vowel *u* (*o*) is an objection to this derivation but it is not insurmountable.

Chichi is a dog in Mexican, it is also defined as "one who sucks;" *chimalli* is a shield, *quauh-chimalli* is a monkey, *chimal-ti-tlan* is "the place where prayer sticks were set up." Here are apparently *three* radically different meanings attached to the root *chi*. Sanskrit, *dhī*, means to suckle; it also means piety, mind "set" on religion; *dhr*, *chi*, means brave, strong. Originally *dhi*, *dhā*, meant to *put*. Hence we get these derived meanings, but *chi* from *dhr* would be a *homonym*.¹

Quetzal-coatl.—The Sanskrit, *çubh*, means (1) to be beautiful, (2) to have a gliding motion. It would seem at first sight impossible to reconcile these meanings, but Mexican usage renders it easier. *Coatl* in Mexican is serpent, and *Quetzal-coatl*, plumed serpent; "The Fair God," gliding through the air with his streaming plumes, fulfils both meanings.²

¹See *Mexican in Aryan Phonology*, p. 11, sec. 5. Also *Quanh-chimalli*, below, p. 52.

²*Coatl* = **çub-a-tl*, serpent. Compare with *coa-tl*, the Babylonian *Hoa* or *Koa* whom George Rawlinson believed to be the serpent of Eden.

CHAPTER V

MORPHOLOGY OF MEXICAN.—Compounds—Terminations—"Tzin"
—Postpositions—L and R—Loss of Terminations.

Compounds.—Languages vary much in their methods of compounding words. English has gone to the utmost extreme of simplicity and merely runs two words together without any change whatever, as house-keeper, black-thorn, honey-comb; the same occurs in Sanskrit and Mexican, as Sanskrit, *amitrasenā*, army of enemies; Mexican, *cuen-chiua*, "wound-put," or slay. In such cases the subsidiary element is merely an adjective or perhaps an objective as in the last. In Mexican, one of the words is nearly always clipped. For example, *calli* is house; the possessive pronouns are: *no*, my; *mo*, thy; *i*, his or hers. Hence *nocal*, my house; *mocal*, thy house; *ical*, his house; *teotl*, god; *teocalli*, a temple; *atl*, water; *acal*, a boat; *teachcauhtli*, a leader; *acalcoteachcauh*, a ship captain, literally "ship-in-leader." *Ciuatl* is woman; *tlacatl*, man; *michin*, fish; *ciuatlacamichin*, mermaid. But Chimalpahin has *Aciautlmichintlaco* as the name of a country, "mermaid-land," in which the terminations remain. It will be seen that the Mexican in compounding, sheds all terminations except those belonging to the last word. Sometimes even that is clipped, which is universally true with possessive pronouns as *nocal*, pronounced *nocalh*, with breathing after last syllable. In Tupi, the particles are pieced together in bits like a mosaic, *aba*, man; *zoö*, flesh; *u*, use, eat; hence *abarouü*, a cannibal. In Quichua, a formidable array of qualifiers, not abbreviated, fall into line with the precision of soldiers on

parade, the principal verb at the conclusion exactly as in the long, mouth-filling, participial phrases of classic Sanskrit, such as the example already quoted.¹

Terminations.—A brief consideration of terminations will help to an understanding of Mexican words just as it will greatly increase our knowledge of English or any other language. In English *r*=he who does, or is. The Latin *ter*, as in *mā-ter*, performs the same office. The Mexican *tl* is the same, as: *camatl*, the mouth; Sanskrit, *cam*, to sip=*camatl*, the sipper. But care must be taken to distinguish roots ending in *t*, in which case the ending is *r*, as: *at-l*, water, *tzint-li*, end. Such words are clipped in compounding as if the termination were *tr*, *tl*, as: *a-calli*, boat; *quauh-tzin-co*, at the foot of the tree.

¹ Lewis H. Morgan has said (*Ancient Society*) that perhaps more books have been written about the Aztecs and more speculation indulged concerning them than has fallen to the lot of any other people. The Nahuatl language has been slighted or mistreated by many writers who have had occasion to come in contact with it. Prescott disliked it and openly expressed his contempt for it, but he may be excused because of his defective eyesight which rendered its study formidable. But he ridiculed the derivations of Kingsborough when in fact Kingsborough was following a trail and Prescott was not. Even such careful writers as Fiske and Morgan misspell Mexican words and evidently at times do not fully comprehend them. The structure of Mexican is such as to lend itself readily to wrong interpretation. The polysyllabic words may at times assume different meanings according to different analyses. *Chichimecatl*, the name of a tribe, is a case in point. It has been defined by Molina, Siméon, and other authorities, as "one who sucks." This is an Indian definition and the Indian definition when it can be ascertained positively is obviously best, since a native always knows his own language better than a foreigner. A. F. Bandelier (*Peabody Museum Report*, 1876-79, p. 393) discusses *Chichimecatl*. He thinks it may mean simply "red men" from *chichiltic*, red, and *mecayatl*, kindred. But *mecatl* may mean a tie, a cord, a whip, a mistress. *Chichi*, unquestionably may mean dog. Hence *chichi-mecatl* may mean just as easily an Eskimo dog team as it could mean "red men," and one writer suggests it may mean a pack of hounds. The syncope of *l* weakens Bandelier's derivation. It should be *chichim-mecatl* to satisfy his solution from a root *chil*. Another writer (*American Antiquarian*), commenting on Bandelier's derivation, suggests *chichic*, bitter + *metl*, "maguey drinkers" (pulque). But this is improbable, I think, since it omits final *ca*. My own view is that two homonyms obscure the meaning. In Sanskrit *dhī*, Mexican *chi*, means to suck; but *dhī* also means devotion; while *dhṛ*, *chi*, means brave. Hence the *Chichi-meca* "dogs" were no doubt simply the pious or the brave people. (See *quau-chimalli*, p. 52. For *ca* (ka), see Whitney, *Sanskrit Grammar*, secs. 1186a, 1222c.)

The principal terminations of nouns in Mexican are *tl*, *tli*, *li*, *qui*, *ni*, *e*, *a*, *uā*, *uan*. Of these, *tl*, *tli*, *li*, *qui*, *ni*, all have the force of *r=tl*, as above, that is, they assert. The difference between *tl* and *tli* appears to be one of euphony, as *conetl*, son; *tlantli*, a tooth. *Li*, it must be remembered, is equivalent to *ri* or *r* of the other tongues, as *icpalli*, a seat might be **icparri*. Such assimilation of a consonant is very common in Sanskrit and Latin, as *scala*, stairway, **scad-la*, **scal-la*. *Qui* no doubt = Sanskrit, *kr* (*kar*) make, one who makes; *chiuqui*, from *chiua*, do, is one who makes and *tla-chiuh-tli* is a thing done or made. *Catl* asserts nationality, trades, etc., as: *Aztecatl*, an Aztec; *puchtecatl*, a merchant. (See p. 46.)

Ni is predicative as, *ni-tlatoani*, or is equivalent to *tl* (*r*), *yani*, a traveler = *ya*, go + *ni*. *Ni* is perhaps a more emphatic asseverative in *tlatoani* one who rules, i. e., who speaks. *Ni* is much used. It is a frequent ending of adjectives and nouns, as: *ni-qualani*, I am angry; *ti-qualani*, thou art angry; *qualani*, he is angry. *Otl*, *utl* is the ending of abstract nouns, though not confined to that class.

E is a possessive ending: *tlantli*, tooth; *tlane*, toothed. *E* appears to have the same function in Accadian.

Ua is the same; *tlatquītl*, riches, *tlatquihua*, a rich man; plural, *tlatquihuaque*. *Ua*, *uan*, New Persian *van*, means neighbor, as: *nota icauallocahuan*, my father, his horse, and its companions = my father's horses. *A* or *tla* means "abounding in;" *tetl*, a stone; *tetla*, a stony place.

Ian, *an*, is equivalent to Latin *um*, Greek *on*; *icalaquian tonatiuh*, sunset, literally, his going in place.

Adjectives usually end in *ic*, *c*, *qui*, *ni*, *o*, *que*, *tli*, though there are many irregularities in Mexican and exceptional usages. Examples of regular forms: *chipauac*,

clean; *coztic*, yellow; *iztac*, white; *tetl*, a stone; *tetic*, hard; *teyo*, stony.

Yo or *o=y* in English. *Eztli*, blood; *ezyo*, bloody; *xochitl*, flowers; *zochiyo*, flowery; *citlallin*, a star; *citlallo*, starry; *iztatl*, salt; *iztayo*, salty.

Ti appears to ascribe quality as in English; *euatica*, seated. *Ti* has the same genitive use in Chinese, Assyrian, and English.

But some adjectives end in *in* as before stated; *imatini*, prudent, from *mati*, to think. Adjectives also end in *ti*, as: *teyacati*, perfect. Words in *ati* (*ti*) may be adjectives, verbs, or nouns, as: *t-iztlacati* (*ti-iz*), thou art a liar. This is called the substantive verb. It is often almost impossible to distinguish this verb from such an adjective as *teyacati*, before quoted.¹ Adjectives also appear to end in *ca*, as: *mimatca*, subtle = *mo* + *imat* + *ca*, really adverbs.

Adverbs are formed from adjectives by suffixing *ca*, as: *chipauac*, clean, *chipauaca*, cleanly; or by suffixing *tica*, as *ilhuitl*, a feast; *ilhuitica*, festively; or with *catica*, as *tlatquihua*, rich; *tlatquihuacatica*, richly. *Ca* = Latin *que* enclitic.

Liztli.—Having neither infinitive nor participle the Mexican language lacks the flowing continuity of the other Aryan tongues. The nearest equivalent to the present active participle in other tongues is the verbal noun ending in *liztli*, as *chiua*, do, make, *chiualiztli*, "a doing" of something. The passive voice expresses the same idea more specifically as, *tlaxcalchiualo*, bread is being made. Mexican grammarians treat this verbal ending as *liztli*, but they were little given to analysis. I think the real

¹ Compare this termination *ati* with *musallikati*, a pipe cleaner, Arabic; also *tl* with *fatatri*, a pastry cook. The copulative verb *be* (sum) is regularly omitted in Mexican.

formation was this: *chiua*, do; *chiua + ra* would mean "doing-becomes" or "doing-attains," which became simply *chiualo*, "is done or made." This is identical with the Latin passive voice. Perhaps this word once took the form **chialis* in accordance with the universal Aryan s termination. From this came *chialis + tr*, a double termination not uncommon in Mexican, hence "chializtli," or, more correctly, "iztli." It is sometimes syncopated as: *choquiztli*, weeping, *not choquiliztli*.

Tzin.—Honorifics are of frequent occurrence in some oriental languages. The Japanese is full of such expressions as: "the honorable passengers will deign to claim their respected baggage." Servility in its varying gradations from slave to monarch, found expression in nicely graduated phrases to fit every possible occasion. The chief Mexican honorific, in fact the only one worth mentioning, is *tzin*. It means sir, honorable, dear friend, lord, etc. A father says by way of endearment, *nopiltzin*, my dear son. I do not know the original meaning of *tzin*. It is possibly the Assyrian *sin*. Naram-Sin, king of Assyria, was the son of Sargon I, and reigned about 3700 B. C. (later authorities say 3000 B. C.).¹ Cautemoctzin was the last Mexican emperor, dethroned and put to death by Cortez 1524 A. D. Here is an interval of 5,224 years between these monarchs, the first recorded and the last to wear this ancient and honorable title or appellation. *Sin* or *zin* is not very closely defined in Norris' *Dictionary*, but reference is made in at least one case to its meaning a great and successful hunter, also soldiers and gods. It

¹ Canon Rawlinson in *The Five Great Monarchies* identifies the "Sin" monarchs with *sinu*, the moon (god), but I think his acceptance of the word is too narrow. Ta *zinnai*, "beasts of chase;" Norris' *Assyrian Dict.*, p. 357; *ts* changes to *sh* or *s*, (Norris); "ili-sunu *zinuti*, ishtari-sunu *sapshati*, unikh;" "gods-their armed, goddesses-their, attired, were reposing" (Norris, p. 359). Compare Sargon with Hungarian, *sarga*, yellow.

evidently was applied to very noteworthy personages. As we have seen, *tzin* became generalized in Mexican, where it finally means little more than Mr. in English. In fact, its use is so generalized as often to seem absurd. It may be tacked on almost any part of speech. Its plural is *tzitzin*. (Compare Chinese *Tientzin*.)

Postpositions.—*Co* in Mexican means *with* or *in*, as: Mexica, the Mexicans; Mexico, with the Mexicans, that is, in the city. The same "thought-form" prevailed in Greek. The Athenians did not ordinarily call their city Athens, if indeed they ever did. They said Ἀθήνησι, with the Athenians. *C* is probably identical with *co* as an abbreviation in such words as Chapultepec, cemanauac. This *k*-form is also Algonquin apparently.

Other postpositives meaning in, or at a place, are *tlán*, in Coatitlán, place of snakes, *qualcan*, a good place; *tlaqualizpan*, meal time; *c* in Chapultepec, "grasshopper hill." *Pal* means in company with, as *ipal nemoani*, a very ancient phrase meaning *deity*. *Pa* signifies like or with, as *ocepa*, another time; it is also Sanskrit, as *pushpa*, flourishing. *Icpac* is summit or top of anything, as *quauh-icpac*, in the tree-top. All these postpositives were probably once significant words in themselves. As may be seen, they answer to prepositions in the modern languages. They are numerous in Japanese and Chinese, and in the latter language, may precede the words qualified. This form of expression indicates the great antiquity of Mexican. But this is not a Mexican grammar and perhaps enough has been said already to make the subject clear. Vestiges of this form of expression linger in English: for instance, *ward* as found in homeward, skyward, equivalent to toward home, toward the sky; manlike, like a man; therein.

This feature of syntax is also employed by the Turanian languages and the modern dialects of India. The Turanian tongues have a peculiar vowel sequence, traces of which are found in Mexican.¹

L and R.—The Mexican alphabet lacks the letter *r*, but *l* is its equivalent. Substituting *r* for *l* in *atl*, we have *atr*, Slavonic *voda*, not much different from water, in fact the same word. *R* and *l* are peculiar letters in the linguistic scheme of the world;² besides being interchangeable, they allow vowels to play hide and seek around them in a puzzling way. In Sanskrit, there exists a *vocalic r* (*ṛ*) and *l* which play the part of vowels. The Sanskrit also has a regular *r* and *l* and the name for the letter *r* is *ra* instead of *ar*. Sanskrit tolerates such forms as *ádṛṣam*, I saw. A vanishing vowel, usually an *a*-sound, must of necessity have preceded or followed *r*. Otherwise *ádṛṣam* is unpronounceable. The usual Greek equivalent of vocalic *r* (*ṛ*) was *ra* as in *dérkomai*, I see; *édracon*, I saw. The latter was possibly once *édarakon*. The unaccented vowel naturally perished. Every student of Greek may recall the fact that anomalies of this kind were usually explained as metathesis, whereas they were cases of vowel decay.

The word for *wolf*, *vṛka*, in Sanskrit, illustrates admirably the vocalic character of *r* and *l*, and at the same time their interchangeableness. The word was originally, probably *vṛk*, *vraçc*, **vrask*, the tearer. The Greek is *lúkos*, *v* disappearing and *r* becoming *l*; Latin, *lupus*; Church Slavonic, *vlúku*; English, *wolf*, **wolk*. The English form is wholly unrecognizable were it not for the connecting links in other languages. Observe: that while Sanskrit and Greek retain *k*; Sanskrit, Church Slavonic,

¹ *Mexican in Aryan Phonology*, p. 8.

² Pezzi, *Aryan Phonology*, pp. 17 ff.

and English retain initial *v*; Latin and English have passed from *k* to *p* (chapter "Phonology").¹

I have gone into the study of *r* and *l* at some length, because *r* in particular is very important in determining derivations, also the value of terminations in many languages. The old Aryan *r* (*ra*) had a determining value, or, speaking grammatically it had a *nomen agentis* value. For example, in the word farmer, farm is the entity or inert object, while *r* adds the significance by affirming an agency and naming the agent. Hence a farmer is the active agent who utilizes a farm. In Spanish caballo is horse and caballero, originally horseman, is a gentleman. Here *r* converts the word horse into a longer word with the resultant meaning "one who rides a horse," the additional *o* being simply for euphony, *ero*=*er*. Thus the single letter *r* expands into the relative clause "he who does."

L and R as primitives.—In Mexican, an *l* may have been originally an *r* but perhaps it never was. In Sanskrit *r* prevails; in Zend and Old Persian *l* is missing. Any discussion of the reason why the Mexicans lost *r*, *b*, and *g*, would involve ingenious speculation, without definite results. The same phenomenon, paucity of consonants, occurs in other ancient languages. The truth may be that some modern forms of speech have simply developed more consonants, though Mexican has unquestionably lost them.² It is a question of abstract phonics and vocalization, in short, a history of human utterance. Persons who are not philologists may be disinclined to accept the mere dictum that *r* so often resolves itself into *l*. There are numerous instances and there is also evidence, apparently, that the lost *r* may unaccountably return to a language as in mod-

¹ Urku is dog in Assyrian, Norris' *Dictionary*, p. 505.

² "Ancient languages are very deficient in consonants," Onffroy de Thoron article, *Aryans of Peru*.

ern Chinese.¹ I will cite another instance where it appears plain that *r* and *l* are synonymous. The Mexican word *tlalli* means earth, the ground; the old Latin word *tellus* meant the same; the modern Arabic *tel* means land, country. But the later Latin for earth is *terra*, Sanskrit, *trs*, to be thirsty (dry). *Tel* in Mexican has become merely initial *tl*. The full word may have been **tlalli* instead of *tlalli*. In Greek *telma* is a swamp. Mexican possesses no ancient literature, no musty tomes or corroded archives in which to trace the evolution of *tel* or *tra*, *tla*. But with such convincing corroborative evidence in languages so widely separated in time and in geographical distribution, as Greek, Latin, Arabic, Mexican, is there any room for reasonable doubt that the Mexicans long ago said *telalli* or *teralli* instead of *tlalli*? Also note what has just been said about *dérkomai*.

Loss of terminations in plurals and compounds.—It is a curious fact that in Mexican compound words the termination of the first member of the compound almost invariably disappears: Thus *cihuatl*, woman, *no-cihuauh*, my wife; *maatl*, hand; *quechtli* (slender); *maquechtli*, the wrist; *puchtecatl*, a merchant, plural *puchteca*, merchants. There seems to be a disposition in this very primitive language to look at things in the mass or quantity rather than as individuals. Thus *Aztecattl*, an Aztec, but *Azteca*, the mass, is the plural or tribe. It seems to me that the Greek neuter noun which takes its verb in the singular involves a similar basic thought. The only explanation I think of concerning the last example and others like it is this: *pushteca* is a sentence meaning they guard or care for goods.² *Popocatepetl* is a similar case of a clumsy noun-sentence, literally "smokes-mountain."

¹ *Chinese Grammar*, by Professor James Summers, Oxford.

² Cf. *Pushman*, an Armenian family name.

CHAPTER VI

MEXICAN WORD STUDIES.—Tlani, Quechtli, Tzontli, Xauani, Ualyolcatl, Pixquilt, Tlaca-tecolotl, Metztli, Tezcatl-ipoca, Youal-ehecatl, Quauh-chimalli, Ozomatli, Mexico.

Owing to phonetic decay the Mexican language presents some curious forms which may often be classed as homonyms. At first I was greatly puzzled by the radical differences in the meanings of the same word. Some of these forms I have been unable to derive successfully, but I mention them here to illustrate the difficulties which beset the pioneer in the analysis of American languages.

Tlani means command, wish, also down; *nite-tlani* means to *gain* at play; *nitla-tlani*, to *lose*. The first appears regular, that is, I have commanded some one or had my wish of him; the second is doubtless one of those idioms found in all languages which cannot be explained by taking the words literally. Nictē-chiuh-*tlani* in tequitl, "I have acquitted you of the tribute," is very hard to explain literally unless we understand: I have relieved you by putting your burden on some one else, "te" being the indefinite pronoun for "others." • This *tlani* may be derived from Sanskrit *trā*, to protect. *Tlani*, down, may be *tr*, trans, through + *ni*, nether, down, as in English *nether*, millstone.

Quechtli is the neck, *maquechtli*, the wrist, but *quechcoatl* is a rattlesnake. I derive the first from Sanskrit, *k r ç*: Old Latin, *cracentes*, classic Latin, *gracilis*, slender; the second I derive from Sanskrit, *khaj*, to shake.¹

¹ See Max Müller, synonyms, homonyms, and polynoms, *Chips from German Workshop*, Vol. II, p. 70.

Tzontli, 400, in enumeration; the head or a head of hair. At first I felt sure this was Sanskrit, *çata*, 100; Greek, *hékaton*; Latin, *centum*; English, hundred. Phonetically this derivation may be termed normal but not proven, hence only *meaning* may determine. If the word originally meant four hundred, or a large number, then *tzontli* is doubtless *cent-um*; but if the original meaning was top, head, then it may possibly be derived from *sán-u*, Sanskrit, top, ridge, a very different word; or it may be a root not found in other Aryan tongues.

Xauani, to drip, and *xaua*, to adorn, would appear to be related, were it not for the suspicious ending *ni*. *Xaua* seems to be found in the Latin, *col-or*. The fact that these very different forms exist with identical meanings in Latin and Mexican is the strongest kind of proof of the common Aryan origin of the two languages. When I had elaborated my system of phonology sufficiently I noticed this word *xaua* and argued that a Latin word from the same root should be spelled *col*. I turned to my Latin dictionary and found the cognate, *col-or*. But *xauani* is from Sanskrit, *sr*, *saraṇa*, to run (as liquids). Compare Latin, *col-o*, and Sanskrit, *jala*; German, *quellen*; and for *xaua*, Sanskrit, *çubh*, to adorn.¹

Ualyolcatl seems a very strange and forbidding word to English eyes. It means kindred, consanguinity. It is derived from Sanskrit, *vr* to inclose, surround, hence those selected or set off from the rest of the tribe + *vrj*, **varg*, which means to turn, or to surround, inclose, thus giving a double meaning to the word, "those selected and inclosed" (in a common household), that is, *kin*, the family. *Vrjána* from *vrj* meant either dwelling-place or *dwellers*.

Pixquitl, harvest, is phonetically Aryan *pisc*; Latin,

¹ See *Mexican in Aryan Phonology*, p. 11.

piscis, a fish; German, fische; Anglo-Saxon, pisc; Irish, iasg; English, fish. The Mexican word for fish is *michin*. How then is this transfer of meaning to be explained if *pixquitl* meant fish? If the Nahua once inhabited the northwest Pacific coast country, their chief occupation was necessarily fishing and to speak of the fish harvest was a natural sequence. But this is one of the cases referred to by Professor Nöldeke (see p. 17) where close resemblance of forms leads the negligent philologist astray. *Pixquitl* is Sanskrit *bīja*, **biska*, seed, and *pixqui*, priest, is no doubt *prach*, Latin, *præx*.

Tlacatecolotl, the devil, "the Rational Owl" (Clavijero), the man owl. This is a very puzzling word (for birds in mythology see p. 116). It may be analyzed *tlacatl*, man + *tecolotl*, owl. Since this is the Indian explanation it must not be ignored. But since Mexican has no literature, hence no records of word-history, it is not unreasonable to assume transfer meanings. *Tlaca*, an adverb, means, by day, visible, and is cognate with Sanskrit, *dr̥ç* to see; Greek, *δέπκομαι*; *tlachia*, to look, observe, is from the same root. *Dar̥ça* in Vedic Sanskrit meant the new moon. *Tecolotl*, owl, is no doubt Sanskrit, *úlûka*, owl **úlûkatl*, and a "bad-luck" bird. The first syllable *tec* is, I think, from *tecolli*, a live coal; from Sanskrit, *dah*, to burn; Anglo-Saxon, *dæg*; English, day.¹ Hence *tlacatecolotl* may mean, "the firebird," "the shine owl," "the moon-shiner," alluding to the bright eyes of the bird or its plumage. This would be a very reasonable definition if *dar̥ça*, the moon, could be made to mean night which it really was. But the Mexicans distinctly meant *day* in their use of *tlaca*, thus: "*tlaca ti-ualla, amo youaltica*," you will arrive by day, not by night, hence *tlaca* may

¹ *Mexican in Aryan Phonology*, Table C.

mean man since *tec* supplies the idea of luminosity.¹ In conclusion I may add that there exists today a belief in the "luminous owl."

Metztli furnishes a curious instance of a transfer of meanings. *Metztli* means: (1) a *month*; (2) the *moon*; (3) a *leg*. *Metztli* is identical in verbal form with the Sanskrit *mās*, the moon, which in turn is derived from *mā*, to measure; Greek, *μήνη*; Latin, *mensis*; German, *mond*; English, *month*. The moon was the universal measurer of time in the ancient world and remains so with Mohammedans. Hence moon and month are etymologically identical. But the word *leg* suggests a difficulty and English history at once offers a solution. Our yard stick was established from the length of a royal arm, and on the authority of Brinton the Mexicans employed the lower extremity as a standard of measure.

Tezcatlipoca, a god, the devil, some say chief of the Mexican pantheon. Analyzed, *tezcatl* + *ipoca*. *Tezcatl* is defined a lake, a mirror but this appears to be a transfer meaning; *pocatl* is smoke, Greek, *πυκάζω*, shadow; image in the mirror as indicated by the possessive pronoun *i*. Hence *Tezcatlipoca* is demon, "his or its image in the mirror." *Tezcatl* is Sanskrit (Vedic), *tāskara*, thief, hence evil-doer. This personage was also called *tezca-*

¹A curious incident is related by the Rev. Frank Borton (*Independent*, December, 1906) as told him by a priest. A certain large cross was a favorite with the Indians. Examination revealed inside it a large stuffed owl.—My speculation has been curiously verified later. The "luminous owl" really exists. See T. Digby Pigott, *Contemporary Review*, July, 1908.

Brinton (*Myths of the New World*, p. 106) says *tlaca* was prefixed to *tecolotl* by the Christians and that no such deity as the "man owl" ever existed (reference Buschman). He defines *tecolotl* as "the stone scorpion," from *tell* + *colotl*. Verily some extraordinary conclusions have been drawn from the analysis of Mexican words. As a corroboration of this cult of the devil in Mexico it may be sufficient to recall the rival factions of ancient Persia, followers of Ormazd and *Ahriman*. A sect in Persia today keeps up this devil worship (Carus, *History of the Devil*, p. 63).

tecotlotl, thus merging the two devils Tezcatl-ipoca and Tlaca-tecotlotl into one. Tezcatl-ipoca the evil specter may be classed with the mirror and left-hand superstitions—being unlucky, ill-omened, malicious. It is a well-known fact that some tribes of Indians refuse to allow themselves to be photographed because the taking of any picture or representation of the person is “bad medicine.” In this connection compare the Aryan traditions connected with the mirror, such as the universal belief that it is bad luck to break a looking-glass, and the Scotch divinations enacted by lovers before the glass. Uitzilopochtli himself (chap. xiv) was intimately connected with this Old Aryan, “left-hand” superstition. Tezcatlipoca was also called *Youal-hecatl* or “Spirit of the Night.”¹ He carried a mirror in which he saw all that went on in the world. The idea *thief* is plainly embodied in the mirror which, as the Indians believe, steals something from you.

Youal-hecatl, spirit of the night, another name for Tezcatl-ipoca. Analogy and etymology combine to indicate that the Greek goddess *Hecate* or *Artemis* is indicated here. *Hecatos* the masculine form was an epithet of Apollo. The torch in her hand was supposed to symbolize the *moon*. She was distinctly a goddess of the night.

¹ The Aztec gods in general had different forms or aspects. Usually they were grotesque or terrible. I will describe one aspect of Tezcatlipoca: A young man of pleasing physiognomy, rather short and stout appearing, and slightly bent forward, this attitude probably assumed to comport with his half bird appearance. His vestment is an ample bird-mantle of blue or pale purple, the wings shading to black at the butts. His boxlike headgear is of the same color and surmounted by waving green plumes. His feet are double, above the human feet, springing from the ankle joints, are the feet of a cock. From his wristlets depend red ribbons, tipped with yellow. His posture indicates animation. Altogether this gorgeous personage done in purple, black, red, green and yellow barely escapes the grotesque. (Kingsborough's *Mexican Antiquities*, Vol. V, p. 189, plate 42; Codice Mexicano, MS 3738 Biblioteca Vaticana.)

For a description of the sacrifices to Tezcatlipoca see Prescott, *Conquest of Mexico*, Vol. I, pp. 79, 80; also Sagahun, *Historia de Nueva España*, Lib. II, caps. 2, 5, 24. For a curious account of his apparition and interview with an Aztec chief, see Chimalpahin, *Annals*, Seventh Relation, 1336, 1457.

She presided over magic arts and spells to which the Nahua were greatly addicted. As goddess of the moon she is directly associated with the moon cult as represented in Hindu mythology and by the Algonquin Manabozho. Dogs were sacrificed to her and she was frequently represented as accompanied by dogs. (See Quauh-chimalli.)

Quauh-chimalli, monkey; *chimalli*, a shield. *Ozomatli* "the divine monkey" was one of the "Stations" of the Aztecs in their migration. What connection can possibly exist between a monkey and a shield? I shall try to unravel this mystery of mythology by offering what I believe to be at least a plausible solution. The days of the month in Nauatl, Maya and Kiché-Cacchikel were assigned "day gods." The eighth day in Maya was called *Chuen*; in Kiché-Cacchikel, *Batzi*; in Nauatl, *Ozomatli*.¹ Both the latter mean monkey, but *chuen* looks as if it meant dog, *κύων*, canis. Hence there *may* have been a transfer meaning in the other two languages from dog to monkey, since such transfers are not infrequent. In Nauatl (and Japanese) *chi* means dog and *chuen* may be the same. The dog in Mexican was sometimes called "the lightning beast," from *tzitzini-liztli*, lightning, an epithet doubtless derived from a homonym, Sanskrit, *dina*, to light up; Mexican, *chinoa*. This is a step toward mythology. The monkey is esteemed sacred in India today. Here is a striking coincidence, the words *dawn* and *lightning*. A third step is that Sanskrit, *dhī*, Mexican, *chi*, means devotion. *Malli* is a puzzle. Is *mal* a root or is it formative? In Vedic Sanskrit *gyama* meant dark or black; *gyāmām* (ayas) was iron in the opinion of Dr. Schrader, though termed "black bronze." From this we see our way to *chimalli*, shield, black, "iron thing," *dhā*, to put. Turn

¹ In Nauatl, *Ozomatli* was the 11th day; cf. cimmerian, *gyāmām*.

again to mythology. Sarāmā, the faithful dog of Indra, came at *dawn* driving up her *cows* with two other dogs (?), Cyāmā and Çabāla, familiarly “blackie” and “spot.”¹ The dog which accompanied the “Unknown God” on his visit to the Inca was *black* (Falb, *Land of the Inca*), and the dog Ceberus played an important part in Greek mythology as guardian of the portals of Hades. Here we have the connection between *chi* or *chin*, the dog “blackie” and *chima*-lli, shield (black iron), also the ideas “divine” and “dawn” or “lightning.” But it remains to explain *quauh* in *quauh-chimal*, monkey. The Sanskrit name for *ape* was *kapti*, which phonetically becomes Mexican *kauh*. Hence if transfer meaning from *dog* to *monkey* took place the whole is clear without employing the specific name of Sarāmā’s dog “blackie,” but simply understanding it as the black ape çymārā, *chimalli*, or “the Divine monkey.”² I do not call this discussion of *quauh-chimalli* strictly scientific, nor is it, in fact, anything more than *plausible* as before stated. *Chimalli* may be derived, in its religious aspect, very directly and simply; *dhī*, devotion + *man*, to think, *man-ri, *malli*; hence “the pious, rational ape.” But this will not explain *chimalli* a *shield*.

Ozomatli.—What was this “divine ape” who gave a day name to the Mexican calendar? As said before *kapti* Sanskrit for *ape* became *quauh* in Mexican as in *quauh-chimalli*, “monkey-sacred,” not tree monkey. Hanuman was a king of the monkeys. Rama Chandra was an incarnation of Vishnu, a sort of Hindu Ulysses. In the Vedas we have *Vṛshā-kapti* the *virile* ape who fought

¹The legend of *The Hound of the Baskervilles*, by Conan Doyle, was doubtless founded on this dog or Cerberus legend. This supernatural dog has become a spirit of evil in the Island of Britain. The Welsh call it *Cwn Wybir*.

²The philologist will ask here why *cya* develops *chi* rather than *chia* or *cha*. I can scarcely answer that question but *usage* renders either form probable.

for Rama. Barth remarks that the modern monkey worship of India may go back to this warrior ape of the Vedas.¹ I would add that it unquestionably does. *Matli* is probably Sanskrit *mad* which may mean: joyous, divine, drunk.

Mexico.—The origin of the word Mexico has caused much speculation. Clavijero discusses it and connects it with the god Mexitli and no doubt correctly. His "house" was Mexicaltzinco. Lord Kingsborough tried to derive Mexico from the Hebrew meshiak, Messiah, "the anointed." In my earlier work I connected it with the Assyrian root *mekh*, which derivation I still believe to have a basis in fact.² Some think it may be *metl*, maguey + *citli*, hare, hence Mexitli would be "the hare of the maguey" and probably related to the Algonquin "Great Hare" Manabozho. Others connect it with *meyalli*, a fountain. This is evidently wrong phonetically. Others suggest *metl* + *ixtli* "face to face with the magueys." This seems absurd and wholly lacking in specific meaning since "face to face with the magueys" might mean almost any place in Mexico.

When the curse was put upon the Azteca, Uitzilopochtli changed their name to Mexica and spake to them: *Yacachto ti-tequitizque*, "for the first ye shall labor." Mexitli was another name for Uitzilopochtli.

The god Mexitli is, beyond any reasonable doubt, simply the Persian Ahura-Mazda, "the great god," the

¹ A. Barth, *Religions of India*, p. 265. The phonetics are: *vrsha*, virile, becomes *ozo* (*uzo*) in Mexican, *r* being dropped; in *kapi*, *p=u*, hence *quauh*=ka-*u*. The frontispiece of *The Story of Vedic India*, Ragozin, gives in colors a picture of the battle between Rama with his army of apes and the demon king of Lanka (Ceylon). The "divine monkey" is portrayed as performing astounding feats of valor and agility. Cf. Paul Carus, *History of the Devil*, p. 82.

² References to *Mekh*, Norris, *Assyrian Dict.*: *mekhazu*, stronghold (p. 768); *mekhira*, a superior (772); *la makhri*, unequaled (778); *mekhran*, a city (780).

Supreme Being. Ahura, Sanskrit *asura*, god, is dropped and only *mazda* = mexitli remains. It is not uncommon in Iranian to extend a root to two syllables by interposing a vowel. Hence *mazd*-a becomes **mazid*-a, Mexican, mex-it-li. The root is *mag* as in Latin *mag-nus*, large.¹ If we consider the Avestan, *mazdian* then we have Mexi-tli = *magian*, a priest of the fireworshippers.

Tenochtitlan, the more common name for the city of Mexico, is simply "place of the rock cactus" and no doubt was named from his own cognomen by its founder *Tenoch*.

¹ Cf. Gray, *Indo-Iranian Phonology*, also Tolman, *Old Persian Inscriptions*, for phonetic changes. Mazda often stands alone.

CHAPTER VII

MEXICAN SYNTAX — The Prepositive-Objective Pronoun and
“Thought Forms”—Sequence in Sentence—Syntax and
Probable Age of Mexican—Coalescing Pronouns—Con-
jugation—“Desinences.”

The prepositive object-pronoun in Mexican seems wholly superfluous. This scarcely comes under the head of compounds and yet it is in effect a species of compounding. In the sentence: Nic-poa in amoxtli, I read the book, *c* (*qui*) is the prepositive objective pronoun which usually indicates that the object will be named later on, but a pronoun must be used whether the object follows or not. The formula is: I-it-read, the book. The indefinite sentence: Peter reads (or reckons) would be: Petolo *tla*-poa. *Qui* is not used with “pacientes,” that is, *personal* objective pronouns as Nimitz-tlaçotla, I love you, *not* Nic-mitz-tlaçotla. The indefinite pronoun *tla*, it, has a similar use but represents things indefinitely while *te* represents persons. This is a curious survival apparently confined to American languages.¹ We may well speculate concerning the origin of so curious a syntactical device. It appears useless now, but once the logical order of expression was different. The primitive man returning tired from the chase or driving his herds, at first sight of his dwelling, exclaimed tersely, “house.” That was the important thing. If he made a statement it was “house, I see it,” “house not far,” etc. Many languages even yet place the object first. It was a long time

¹ Compare, *ni-te-tla-maca*, I give-him-it, with French, *je-le-lui-donne*, I-it-to-him-give.

before the more analytical, detailed statement "I see our house" could come into use.¹ Perhaps the Mexicans began to place the object after the verb, occasionally, at first, and then generally, and the old instinct probably told them there should still be something before the verb to act as a sort of index. It is possible that *c* was at first an objective case sign, indicating the object in a tongue, without gender, number, or inflection, like the Japanese *ga*, the sign of the nominative case. The noun may have been switched over to follow the verb, while the sign got glued to the subject pronoun and remained there. Japanese and Chinese still use such signs; also Tupi, to a limited extent.

I think, in fact, Tupi may offer a curious corroboration of this view. There is a feature of the possessive-objective in that language which I confess I am unable to understand from the meager, hazy treatment given the subject by Ruiz de Montoya, though I have tried hard to grasp the gist of the matter. He speaks of "reciprocals" and "relatives." The rule is, that every noun beginning with *h*, *t*, *r*, has its relative *g* and its reciprocal *h*. Other nouns have *y* "relative," *o* "reciprocal." *Tera*, name; *cherera*, my name; *hera*, his (*ejus*) name; *guera*, his (*suum*) name. Example: *tub* begins with *t*. Peru *guba* *ohaihú oci abé*. Peter his father loves, his mother also; *g* is a "relative" possessive-objective. Tupi is given to queer phonetic changes; *tu* or *tub(a)* is father; *cheruba* is possessive-nominative, my father (*che + r + ub*); *guba* is possessive-objective. May not *g*, here be an old objective sign coalesced and analogous to the Mexican? The

¹The first arrangement has been called the "logical" and the second the "natural." These are arbitrary terms since both are logical and both natural. Byrne says that thoughtful races adopt the order subject-verb while careless races employ verb-subject. *Principles of the Structure of Language*, Vol. II, p. 281.

formula would be $g^e + tub$. [In fact this seems to be wholly a question of phonetics.]¹

Sequence in sentence.—Modern Mexican places the adjective before the noun, and the object, as a rule, after the verb, thus following the “natural” order. But there are indications that once the “logical” may have at least partially prevailed. The usual order in an indefinite sentence is (1) inseparable, nominative pronoun, (2) prepositional, objective pronoun, (3) verb; as: *ni-tla-qua*, I-it-eat. But the object noun may be clipped of its termination and compounded before the verb as: *nacatl*, meat, *ni-naca-qua*, I-meat-eat; finally where nouns are employed for both subject and object the order may be (1) verb, (2) object, (3) subject; as: (a) “*Auh ic quin-macac in ipiltzin in Chinancoca itoca Cacamatl Totec*; Chinancoca gave them his son by name Cacamatl Totec.” Or the order may be, (1) verb, (2) subject, (3) object: as (b) “*yancuica achtopa oquittaque in Tlacochealca-Chalca in opopocac in tepetl*, for the first time the Tlacochealca-Chalca saw [that] smoked the mountain.”² Mexican continually employs the predicate adjective in what must be considered as a sentence. Thus Sanskrit, *vṛshá-kapí*, virile ape; but the Mexican reverses this, a Latinism, and says ozo-

¹ In the Tukiok dialect of Polynesia, there is something resembling this: *mig ruma* or *ruma-ig*, equally mean, my house. A Melanesian form is *etua-k*, my father. In Papuan, *ina-gu* is my mother. But these affixes are all in the first person. As to position, notice *post-* and *pre-*position in the first example quoted. Brinton gives *uba*, father, but Montoya's excellent dictionary gives: *tu.b*, father; *cheruba*, my father; *tuba*, *ejus pater*; *guba*, *suum pater*. With such phonetic changes it is very difficult to determine the real root. Brinton apparently held the view that “relatives” refers to relationship, consanguinity. But there are changes which are not capable of such explanation and are hard to explain in any way as *tesa*, eyes, *cheresa*, my eyes; *supia*, egg; *sapucaí*, hen, but *sapucaí rupiá*, a hen's egg. Compare Sanskrit change of final *r* to *s* and *nigori* in Japanese, as *kuni kuni* to *kuni guni*. This change applies to prepositions also in Tupi as *tenonde*, before; *guenonde*, before *him*.

² References: Chimalpahin, *Annals*, Seventh Relation (a) year 1342; (b) 1347. The earliest historical account of an eruption of Popocatepetl.

matli, the ape [which is] active. Compare the French *un homme grand*, a man [who is] distinguished, but *un grand homme* is simply a tall man.

Age.—Mexican syntax is also a strong proof of the extreme antiquity of the language. The Vedic Sanskrit allowed much more latitude in the position of modifiers than did the classic Sanskrit. The same feature prevails in the Mexican today. To illustrate: *o-mo-ual-cuep*, he returned, literally “he back turned.” Here *o* is the augment which is separated from its verb *cuep* by the adverb *ual* and the pronoun *mo*. This arrangement in Greek would be an impossible barbarism. The augment is frequently omitted in Mexican, in perhaps half the cases, the same thing in the same proportion holds good in Vedic Sanskrit.¹

Mexican has no *infinitive*, though Assyrian possessed an infinitive 5,000 years ago. It is not probable that Mexican once had an infinitive and lost it later. I know of no such case. The rudiments of an infinitive, perhaps the very germ as it were, arrested forever, may be found in the use of *tlani*. Here one verb was plainly made dependent on another in an infinitive relation, as, *nictemactlani*, I have ordered it given another; *nictechiuhltlani*, I caused another to do it, *ninomauicollani*, I desire to be honored. Had this usage extended to all verbs instead of being confined to this parasitic *tlani*, a genuine infinitive would have resulted. *Poloa* is used similarly.

The Mexican is extremely simple in its syntax, nevertheless. The adjective as an attributive precedes the noun as in English. *Iztacciuatl*, the name of the great volcano, should really be spelled as two words: *iztac*, white, *ciuatl*, a woman, so called because the snow on its summit lies in

¹ Whitney, *Sanskrit Grammar*, sec. 587, a, b, c, d.

a long line resembling the body of a dead woman in her shroud; in Spanish *Mujer Blanca*. The possessive adjunct usually precedes its head word, though no ambiguity results if it follows thus: *Nota i-cauallo*, my father's horse, literally, "my father, his horse," or *i-cauallocahuan* in *nota*, my father's horses. This is New Persian as, *daman i-koh*, hillside. For the important and peculiar use of the possessive pronoun, as used in *nota* (no *tatli*), I would refer the reader to a Mexican grammar.

Connectives are few in Mexican. There is no true relative pronoun. This lack of connectives gives the language scantiness of thought or at least the appearance of it, as: *Nic-nequi nic-quaz*, literally, I wish I shall eat, for I shall eat. There is an ambiguity in the use of the imperative in the singular. Thus: *ma nitla-qua* may mean (1) May I eat (precative); (2) I do not eat; (3) I am going to eat. The voice distinguishes them.¹

Coalescing pronouns.—In Assyrian the possessive pronoun follows its headword instead of preceding it. Thus, "their corpses" would be written *pagri-sunu*, corpses-their, while the Mexican would say: *sunupag*, clipping the termination from the last word, assuming that he used the same words. But position may count for little. Considering the lapse of time, perhaps the Assyrian once said *sunupagri*. It must be borne in mind that Assyrian was spoken without radical change through a period of nearly 5,000 years. Such language-vitality makes English and other modern languages, except Greek, Lithuanian, Finnish, etc., seem like mere mushrooms of speech. We are 2,500 years later than Nebuchadnezzar, but the latter himself, was 3,200 years later than Sargon I. Both spoke Assyrian. Lithuanian retains a curious sort of

¹ Olmos, *Grammar of Nahuatl*, p. 82.

liaison which practically links two words into one, as the recent investigations of R. Gauthiot in Lithuania conclusively show and decide a mooted point.¹ The Hindus wrote an entire sentence as one word, and liaison in pronunciation probably took place as in modern Lithuanian in certain cases, though modern grammarians are inclined, I think erroneously, to consider this feature of classic Sanskrit as largely artificial.² (See the Sanskrit phrase quoted, p. 34.) In language we must accept things as they are, however illogical and arbitrary they may appear. Apparent contradictions may exist side by side in dialects of the same language. Thus in colloquial Arabic, the pronoun, possessive or demonstrative, precedes its noun in Syria, as: *thal-beit*, this house. In Egypt it usually follows as: *el-beit tha*.³

The coalescing possessive pronoun would appear to be Semitic, but it is also Hungarian as, *tolla*, a pen (feather); *tollam*, my pen; *tollad*, thy pen. Compare *tolla* here, with Nauatl *tollin*, a reed; Spanish *tulé*. This prepositive adhering pronoun is not a feature of Aryan syntax in general. This fact alone might indicate that Mexican is a Turanian language which separated from the mother tongue along with West-Ugrian (Finnish and Hungarian) before the defection of Aryan, were it not for the Aryan vocabulary of Mexican. The *postpositive* system is not Western-Aryan, but it finds many parallels in Sanskrit as *manushvát*, as Manu did. But the lack of an infinitive, which Sanskrit possesses, and which is wholly wanting in Mexican, indicates clearly the archaic form of the latter.⁴

¹ Lithuanian, *Buividzé Dialect*, Essai, par R. Gauthiot, Paris.

² Whitney, *Sanskrit Grammar*, 101, a.

³ Tien's *Manual*, p. 52.

⁴ Modern Bulgarian has no infinitive. For discussion of the development of infinitives see Max Müller, "Rede Lecture" in *Chips from a German Workshop*.

The infinitive proper is a subtlety of speech which indicates considerable development in language.

Conjugation.—Mexican certainly appears to contain the first stages of Aryan verb conjugation, as exhibited in Sanskrit and Greek. Let us examine the Mexican verb, taking *maca*, to give, as a model: *Ni-c-te-maca*, I-it-to someone-give.

INDICATIVE MODE

PRESENT TENSE

<i>Singular.</i>	<i>nicte-maca</i>	<i>Plural.</i>	<i>ticte-macâ</i>
	<i>ticte-maca</i>		<i>anquite-macâ</i>
	<i>quite-maca</i>		<i>quite-macâ</i>

Notice that the third person is subjectless, with regard to pronouns, a defect common to some American languages, also to Japanese, Chinese, etc. The reflective and impersonal, however, employ the subject as: *mo-chiua*, it is doing.

FUTURE

<i>Singular.</i>	<i>nicte-macaz</i>	<i>Plural.</i>	<i>ticte-macazqué</i>
	<i>ticte-macaz</i>		<i>anquite-macazqué</i>
	<i>quite-macaz</i>		<i>quite-macazqué</i>

PRETERITE

<i>Singular.</i>	<i>onicté-mac</i>	<i>Plural.</i>	<i>oticté-macqué</i>
	<i>oticté-mac</i>		<i>oanquite-macqué</i>
	<i>oquite-mac</i>		<i>oquite-macqué</i>

Here we perceive distinctly the “s” sign of the future tense and the aorist system as best illustrated in the Greek. In the Mexican future and preterite plural ending, “*que*”=ka, I think may be seen the equivalent of the Greek perfect termination ka. The “s” sign of the future, the *augment* and the perfect sign ka are thoroughly Greek, hence Aryan. It is impossible that this is the ruins of an earlier elaborate system of con-

jugation. The usage of the two tenses also corresponds largely as: *euréka*, I have found it; *onicté-mac*, I gave it, or have given it.

[This view, formulated in the earlier part of my work, is perhaps not adequate in the treatment of the verb.]

Desinences.—These devices, unknown to western Aryan tongues, give added significance to a verb. *Co*, *quiuh*, *qui*, mean “just done” (*venir de faire*) *nitla-quaco*, I come to eat, just arrived; *to*, *tiuh ti*, “about to do” (*aller faire*), *antemachtito*, you (plu.) have gone to teach. The use of the desinences is very subtle, and at times apparently arbitrary. An extension of meaning is also given by linking two verbs by *ca* or *ti*, as: *nitlaquaticac*, *ti + icac*, I eat standing up.

CHAPTER VIII

The Particle "tla"—"In," its Use and History—Grammatical Gender—"Animate" and "Inanimate"—Thought Forms and Style.

The particle tla.—The Mexican pronoun *tla* is in constant use, in fact it is greatly overworked. It is an indefinite pronoun, the use of which may be illustrated in this brief sentence: *nitla-matoca*, I touch it, literally, "I it touch." The active Mexican verb must always have an object, as has been remarked before, and when the object is unknown or the speaker does not think it worth while to mention it, he merely inserts *tla* to represent it. *Tla* begins many verbs, as an integral part of the word, and is often simply initial *tr* or *dr*.

There are cases where *tla* seems superfluous, and adds nothing to the meaning, as: *tlamana*, to make an offering; *tlanonotza*, to tell a story; *tlapixqui*, to guard; *tlaçotla*, to love; *tlatlactalhuia*, to injure; *tlaicnotililli*, impoverished. As may be seen, these verbs are all active, but even a noun or an adjective may take *tla* in the sense of an object, as *tlatomalli*, something unraveled, though in this case the verbal might well govern an object. This constant repetition of *tla* is one of the defects of the language. Such extreme cases as *tlatlaçotla*, to love, arise from etymological complications.

A large proportion of the excess of words under *t*, which constitutes about one-fourth of the entire vocabulary, is caused by this persistent *tla*, and *tla* as an introductory particle or pronoun cannot be easily explained. Mexican grammarians derive *tla* from *itla*,

thing. Let us insert thing and see if it is adequate. "Raveled-thing" makes sense; but there is no sense in "love-thing," "pray-thing," "oration-thing," "injure-thing."

In my opinion, *tla* must be sought elsewhere. It is simply *tr*=through, completely; Latin, *trans*; Sanskrit, *tra*. It often appears to be simply an article as: *tla*-*tomalli*, unraveled; *tla*-*chiuhtli*, a thing done. In its most general sense it has the signification of by, with, through, or because of, but in *tlachia*, to observe, from *dr̥ç*, *tla* is an integral part of the root.

A further material increase of verbs under *t* is caused by the emphatic prefix *te* (*ta*) which I take to be sometimes the demonstrative pronoun; Sanskrit, *ta*, *tad*; English, *that*; but Olmos pronounces it a syncopated form of *tequi*, much, greatly.

In.—The Mexican language has, properly speaking, no article, yet *tla* in such a word as *tlachiuhtli* is translated *a*, a thing done. But *in* is so often used clearly as an article, that it may almost be said to assume that function. Yet *in* so often appears superfluous that the reader is continually at a loss to determine its proper significance. The Spanish grammarians of Mexico are accustomed to assert that the Mexicans continually interjected superfluous words into their discourse simply to fill up, so to speak, and round a phrase. The poetry of Nezahualcoyotl¹ affords numerous examples corroborating this fact, and the same doubtless may be said of harangues in council. But poetry in all languages abounds in figures, inversions and pleonasm. In serious prose, *in* probably has always a definite use, but only a Mexican knows its proper use, and he must be an intelligent

¹ Daniel G. Brinton's edition, Philadelphia, 1880.

person. It would be profitless to dwell on the subject here. Its place is in a Mexican grammar. But an evidence of the extreme antiquity of the word *in*, in its article sense, is found in an inscription "in Susinak," 1200 B. C.¹ In modern Persian *in* is the demonstrative *this*, and in Mexican *inin* is *this*; *inon*, *that*. This *on*, by the way, is thoroughly Saxon, meaning extension, further.

Grammatical gender.—English is a language which is strictly logical in its use of gender. It follows nature, the male takes a masculine pronoun, the female a feminine, and all that is neither male nor female is neuter, without exception. Most languages are arbitrary in this respect. In French, a house, *maison*, is referred to as *she*, while *mur*, the wall of the house, is *he*. Grammatical gender is a subtle question which cannot be discussed fully here.

Animate and inanimate.—The Indian languages usually divide all things into two classes, "animate" and "inanimate." Some philologists consider this classification as an evidence of great age, but modern Persian has "rational" and "irrational," which amounts to the same thing, and this distinction, animate and inanimate, is sometimes arbitrary.² For example, in Chippewa, *akkig*, a kettle, is an animate object. In Mexican, only animate nouns have plurals, as *ichcatl*, sheep; plural *ichcame*; *na-ualli*, a sorcerer; plural *nanaualtin*; *ticitl*, a doctor, plural *titici*. Spanish has had some influence in causing inanimate nouns to assume plurals.

Where it is necessary in Mexican to distinguish between male and female, and the words employed do not in themselves indicate sex, *oquichtli* is used for male and *cihuatl*

¹ Jacques de Morgan in *Harper's Magazine*, May, 1905.

² See Veblen, *Theory of the Leisure Class*, Introduction.

for female, as *oquichmazatl*, a stag; *cihuamazatl*, a doe. The same method prevails in modern Persian, as: *gav i-nar*, a bull ("man cow"); *gav i-mada*, a cow ("woman cow").

Let the fact be emphasized that animate and inanimate are not synonymous with living and non-living as we understand the terms. Primitive man endowed all things with a relative intrinsic importance, aside from any natural classification. Thus the ground-squirrel might be considered so insignificant as to be placed in the class inanimate, while the camp kettle, by reason of its important place in domestic economy, was raised to the higher classification of animate things. All this may appear very childish. In fact, it is childish, but do we not daily see children talk to their playthings, and even go so far as to reward the good and punish the bad? But primitive man did have reasons for his classification since his animate things were important according to his knowledge of them.

Dialects.—The Nauatl language bears internal evidence of differences which probably result from dialectic variations due to the mingling of tribes. The Spanish lexicographers and grammarians speak of these dialects and agree that the best Nauatl was spoken at Tezcucó, the Athens of Anahuac. These variations no doubt originated in Asia. For example in Mexican we have *telpochtli* or *telpocatl*, a youth; *chiuhc naui* or *chica naui*, nine; *teuctli* or *tecuthi*, a chief. The name of the Afghan language is *Púkhto* or *Púshto*. A philologist writes me: "philologists require uniformity." Quite so! But they do not always get it.

Thought forms and style.—Most students of Nauatl eulogize the beauty and expressiveness of that language. The word nauatl means, *sweet sounding, clear*, as defined

by Molina. The language has at times a sonorousness to be compared favorably with Latin. But I cannot join in unqualified eulogy of the Mexican language. It is lacking in that precision which makes equivocation almost impossible in Greek or Latin. It sometimes defies construction. Brinton, on this point, says that all words not directly connected with the verb are without construction, but this, while occasionally true, is an extreme statement. The following sentence is a fair example of the capacity of Mexican syntax to express sustained thought:

No iquac ipan inin omoteneuh xihuitl in quixixitinique
 Also then in this aforesaid year (they) demolished
 nohuian ipan Nueva España in inteocal ihuan imixiptla
 everywhere in New Spain the temples and images
 in tlacatecollo in quimoteotiaya ueuetque tocolhuan,
 of the gods, which (they) worshiped, the ancients, our ancestors;
 ye yuh matlaxiuitl ipan ce xiuitl moetztcate in matlacomé
 already ten years with one year were (here) the twelve
 San Francisco teopixque inic motlaxixinilique nohuian,
 San Franciscan priests when (they) destroyed everywhere
 ye yuh caxtolli on ce
 [the temples and images of the gods] already fifteen on one
 xihuitl oacico in Españoles in iquac tlaxixitin
 years had arrived the Spaniards when (was) the destruction
 nohuian.
 everywhere. (Annals, 1534.)

The first clause is tautological though it is Chimalpahin's regular formula. "No iquac ipan inin" would express the same idea in this context omitting "omoteneuh xiuitl."

PARABLE OF THE WOMAN AND THE LOST COIN (Luke 15:8)

Anozo aquin zoatlacatl quipia matlactli tomin, oquipolo
 Or what woman has ten tomins (she) has lost

ce tomin amo quixotlaltia tlanextli ihuan qu'ichtoa
 one tomin (does) not sweep (up) the dust and search
 in calli ihuan necuitlahuiztilica quitemoa in oc quiaziz?
 the house and diligently it seek until (she) it finds?

A favorite construction puts the name of a place in apposition with *ompa* or *oncan*, there, as:

Ipan inin acito xochiyaoyotl in ompa Chalco-Atenco.
 Now began (the) "war of flowers" there (at) Chalco-Atenco.

The verb *ca*, to be, is little used and then usually either for emphasis or to denote condition rather than mere existence.

Ca çan oc inceltin, in macehualtin, in miquia.
 (It) was but themselves the vassals who were perishing.

Redundancy is of continual occurrence.

Ipan inin poliuhque in Cuanahuaca, quinpehuato
 This (year) fell the Cuernavaca, them-conquered
 in Mexico.
 the Mexicans.

Nopiltzé, nocuzqué, noquetzalé, otiyol,
 My dear son, my jewel, my plumè, thou wert begotten,
 otillacat, otimotlalticpacquixitico.
 thou wert born, thou hast arrived on earth.

Death of Cauhtemoctzin (Guatemozin), introducing Spanish words. (*Annals*, 1524.)¹

Ye yuhqui ye Christianoyotica momiquilli, cruz imac
 Thus Christian-like he died, cross in hand
 quitlallique auh in ixierillos² tepozmecatl, inic
 (it) they placed, also foot-irons (an) iron-chain, as to
 canticaya inic pilcaticatca³ pochcauhtitech.
 him they secured, when he was hanged, (a) silk cotton tree-on.

¹ Hanged in Honduras by Cortez for alleged conspiracy against the Spaniards.

² Crillo or grillo, a cricket, Spanish; in the plural, fetters.

³ For the precise meaning of these compounds verbs linked by *ti*, which usually gives emphasis or increased significance, see a Mexican grammar. Can (C'an)=qui-ana, to seize, secure. Pilca, means to hang, to seize, to attach to.

THE LORD'S PRAYER ANALYZED

Totatziné in ilhuicac timoyetztica, ma yectenehualo in
 Our Father heaven-in thou art (rev.¹) May be revered the
 motocatzin, ma huallauh in motlatocayotzin, ma
 thy-name (rev.¹), May (it) come the thy-kingdom (rev.¹), May
 chihualo in tlalticpac in motlanequilitzin in yuh chihualo
 be done earth-on the Thy-will (rev.¹) as (it) is done
 in ilhuicac. In totlaxcal momoztlæ totech monequi ma axcan
 heaven-in. Our bread daily (as) to us necessary (is) may now
 xitechmomaquili, ihuan ma xitechmopolhuili (rev.¹)
 to us thou give (rev.¹), and may thou us forgive
 totlatlacol in yuh tiquintlapopolhuiâ intechtlatlacalhuiâ. Ihuan
 our sins as we them forgive(others)their us-injuring. And
 macamo xitechmomacahuili inic amo ipan tihuetzizque in
 never permit us (rev.¹) that (not) there we may go (rush)
 teneyeyecoltiliztli, ganye ma xitechmomaquixtili (rev.¹)
 into (great) temptation, and may thou us not let come
 in ihuicpa in amo qualli.
 in contact-with (the) not-good.

¹ There is a form of the verb which is called "reverencial." It is indicated here (rev.). The other words in parentheses are supplied to complete the sense in English. In such situations as in ilhuicac, *h* is silent and merely separates vowels, or adds stress to the vowel preceding it, as il-ooi-cac. This word is Sanskrit rocanâ, heaven. *Tzin* is honorific.

CHAPTER IX

Individuality of Languages—Inflection—Accent and Rhythm—
Repute and Disrepute of Words—Ancient *versus* Modern
Syntax.

Individuality.—It seems a marvelous fact that of all of the myriads of millions of human beings who exist or have existed in the world, no two individuals are exactly alike. It seems equally remarkable that after the lapse of thousands of years, nature appears to produce a duplicate of some former individual. For example, Gen. U. S. Grant strikingly resembled a certain Roman emperor. Now if unity of human speech be assumed, as a matter not yet sufficiently settled to be asserted as a fact, how has this great confusion of tongues been brought about? There are in the world, or have been in existence in past times, perhaps 3,000 languages and dialects (only an approximation not capable of proof), and it is a well-known fact that every language is foreign to every other language.¹ Even languages so near akin as Italian and Spanish have comparatively few expressions which are identical. Any untraveled native of the United States who will make a journey to Scotland and attempt to converse with the old-fashioned people of the Scotch villages, will realize for the first time the full meaning of the word dialect. He will surely return satisfied as to his own linguistic poverty. And yet Scotch is only a dialect of English, and not a very pronounced one at that. English and German are closely akin, but an English-speaking person

¹ Quoted from memory, as read in some periodical. I think the figures by far too large, but some place it at 4,000.

at the first attempt will be unable to comprehend a single word of German. We have all met people who understand German or French, but who are unable to speak those languages. I leave these remarkable people out of the reckoning. Yet both these languages contain numerous words identical with the English words for the same things.

Inflection.—What then causes the radical difference which exists between languages? If the Aryan 5,000 years ago said *lubh*, love, *bhar*, bear, and the American today says *love*, *bear*, which though spelled differently, may have had practically the same pronunciation as the ancient Sanskrit, why could not these two individuals readily understand each other if they got together today, granting our Aryan could rise from the dead by a miracle? It sometimes happens that dress makes the man; it is always so in language. The Aryan furnished the root with strengthening devices and pronoun endings longer than the root itself in some instances.¹ If he said something like *dragámi*, *dragási*, *dragáti*, I drag, thou draggest, he drags, or perhaps very clearly drag-ha-mi, his speech could not by any possibility sound like *I drag*; but when he said *lekshi*, thou lickest, he very nearly spoke English. Expressing thought-relations by means of adhering affixes (and infixes) is called *inflection*, when the word is welded into an inseparable whole. But this subject will be dealt with more fully, farther on. It must have taken the Sanskrit-speaking people fully 1,000 years to

¹In its general sense, *Aryan* apparently means free people, superior race. Max Müller first used the word in a linguistic sense. There has been much discussion as to the original home of the Aryans. Sayce inclines to northern Europe and cites the fact that the Aryans had three seasons, that the words *ice* and *snow* are common, also the fact that the *vocalic* system of Europe is older than that of Sanskrit. Dr. Schrader inclines to the steppes of Southern Europe and notes that the *horse* was known, but not the *ass* or the *camel*. *Thering* names the Hindu Kush. His arguments are very full, lucid, and convincing, and I think there can be little doubt of the correctness of his conclusions.

build up their marvelously finished system of inflection. It has taken the English-speaking people 500 years to strip off the inflectional system, inherited from Anglo-Saxon. Had we advanced a little farther, and adopted a hieroglyphic or character alphabet, instead of a phonetic, and become an isolated people, we might today abide in the tents of the Chinaman so far as language goes. He is wholly monosyllabic, we are nearly so in the language of every-day life. Instance this sentence: I saw the boy light the straw stack with a match and then take to his heels as fast as he could run. Here twenty-three monosyllables move along with a jerky, unmelodious sequence, which is characteristically English.

Why did inflection fail? Because, like dress, it became too elaborate and cumbersome. Only natives could use it intelligibly. Hordes of invading foreigners could not master the new tongue. The ignorant, when knowledge declined, made many mistakes, confused forms, and obscurity was the result. Circumlocutions were resorted to as an aid, which resulted in corrupting language till finally the whole fabric crumbled and new tongues sprang up, not founded entirely on roots, but partially on the débris of collapsed polysyllabism. But there is no apparent reason why a new inflection may not be set up in the course of time. Our English possessive is a case in point. *John's book* was once *John, his book*. I have seen it written so in my own time. The term *lingua rustica* is a stalking-horse, which I believe greatly overworked. It is employed to explain the differences in vocabulary and syntax between the Romance languages and Latin.¹ I have no doubt the most ignorant Roman

¹Strange differences do exist, however, side by side. In Java the women speak a dialect different from that of the men. "In Sanskrit plays the women spoke Pali." Max Müller, *Science of Language*, Vol. II, p. 44.

readily understood Cicero and Cicero could understand him. The capacity of the illiterate to employ habitually and correctly a very intricate language has been underestimated. Instance Chippewa as a lucid example. We may as well be prepared to believe that the Vedic Aryans who had never heard of phonetics possibly understood fully their sentence liaison (see p. 61).

Accent and rhythm.—There is also a rhythmic, tonic and accentual individuality in language. English has a vicious habit of slurring the final syllable of a word. Thus the word "labor" might be spelled indifferently bar, ber, bir, bor, bur. Compared with the nicety of pronunciation prevailing in many languages, English is indeed a sloven, but this habit is not confined to English since others have the "neutral" vowel. Accent is usually difficult to acquire, and by accent I do not mean pedantic pronunciation merely. There is a certain indescribable, rhythmic swing, I had almost said lilt, which every language possesses, and which can be acquired only by careful attention and long practice in speaking with those to whom the language is mother tongue. It is this subtle feature of the French tongue which brings grief to so many who think they have mastered French in school, but who are unable in France, to ask the servant to make a fire for them. The marked undulatory cadence of the Spanish is at once sonorous, melodious, and baffling to a foreigner.

Repute and disrepute.—Words, like human beings, are subject to many vicissitudes. Fortune smiles on one and frowns on another. The same word may be in good standing in one language and in bad repute in another. For example, take *pal*: *ipal nemoani* is an appellation of god in Mexican; the English *pal* may be a thief.¹ Again

¹ *Pal* and *cul-ly* are no doubt borrowed from the Gypsies since *Romany* is an Indo-Iranian tongue.

there are vulgar words not admitted in any dictionary, whose roots lurk in speech and may be traced back to prehistoric times. They will never die, though they may be denied print. Others again hover on the ragged edge of respectability. Some words are refused admittance to so-called Saxon dictionaries which are freely admitted to the dictionaries of other nations less prudish. Then fashions in words change, and a word in good repute now, may be fallen very low a hundred years hence.

Ancient versus modern syntax.—Ancient thought-forms seem disjointed and scanty compared with the analytical methods of modern tongues. For "I wish to eat," the Mexican says: "I wish, I shall eat." The same lack of continuity renders the Assyrian uneven and disconnected in its style. In Tupi the tenses are clumsily pieced out by means of adverbs marking the time when an action occurs, and the modern value of connectives is not clearly appreciated. Thus: "Peru guba oahihú, oci abé;" "Peter his-father loves, his-mother *also*," for the more precise and elegant "Peter loves his father and his mother." But in its "desinences" (p. 63) Mexican possesses a device of syntax which in English would require a separate word. Thus: in *aquin o-aci-co*, "he who has just arrived," where *co* indicates an action completed at the present moment like the French: *Il vient d'arriver*.

And yet the significant fact remains that these ancient tongues are often competent to express any idea which the human mind is capable of conceiving. The Chinese language, though apparently indefinite to a foreigner, is said by critical students of the language to be wonderfully precise and that equivocation is almost impossible unless it be intentional. Clavijero remarked that Nauatl was capable of expressing the most abstruse conceptions of

the Christian religion without the aid of a single foreign word.

The chief obstacle in adapting such languages to the needs of modern civilization is the *lack of words* for the multitude of things of modern invention. The Mexicans, for example, had no horses but they adapted *caballo*, the Spanish name, as *cauallo*; but for *bridle* they invented the formidable compound *cauallo-tepuz-tem-meca-yotl*, literally, "horse-iron-mouth-cord [thing"].

CHAPTER X

LANGUAGES AS TO THOUGHT-FORM—Incorporation—Agglutination—Classification—Monosyllabism—Inflection—Relative Merits—"Speak" Conjugated in Five Languages—Unity of Human Speech—Persistence—Phonetic Changes.

Languages have been classified as *agglutinating*, like Turkish; *monosyllabic*, as Chinese; *inflecting*, as the Latin and all the Indo-European group; and *incorporating*, like some of the American languages.

Incorporation.—Mexican has been described as a typical incorporating language. What is incorporation? Professor Henry Sweet says: "If we define inflection as 'agglutination run mad,' we may regard incorporation as inflection run madder still: it is the result of attempting to develop the verb into a complete sentence."¹ In the same connection he says: "Incorporation is nowhere more logically carried out than in Mexican." I think there is at least room for argument here. In its development, language doubtless followed the universal law of nature that the concrete must precede the abstract. A thing, in other words, must exist before we can speculate on its origin, or discuss its properties. It may be shown that Mexican is scarcely an incorporating language at all, if indeed there really be such a thing as an incorporating language.

Analysis resolves all things and substances eventually. Here let me recall a thought of Albert Gallatin's, no mean authority, by the way, who has a few words to say in this

¹ Sweet, *History of Language*, p. 69. It is manifest that no such *conscious* attempt was ever made by any people in the growth of a living language.

connection. I give the substance of his thought, not his exact words. He sensibly concludes that the first whites who attempted to learn the language of the Indians, being guided solely by sounds, and having no written material to exercise the eye upon, naturally mistook phrases for words, sometimes, and consequently joined together particles or words in cases where thought-form really allowed a hiatus. He gives some examples. Continuing in his line of thought,¹ suppose I say in colloquial English: "Gimme some bread." Would not a foreigner be almost sure to understand "gimme" as one word? The Spaniard says: *digaselô*, tell to him it, but Spanish is not an incorporating language, nor is it agglutinating beyond this one single feature, the personal pronouns, in so far as I can recall. When the Spaniard coined the word, "correve-dile," "run-see-tell-it," for talebearer, he clipped old words to make the new. Does he compound, incorporate, or agglutinate?

In fact the only feature of Mexican syntax which can be, strictly speaking, classed as incorporative is the curious prepositive object-pronoun (chap. vii). I will take Sweet's own example, *nic-qua*, I it eat, where *c* (*qui*) is the incorporated pronoun. Next he considers "*ni-nakaka*," "I meat eat." The Mexican spelling is "*qua*" which is not mentioned here as a correction of Professor Sweet's spelling, since he employs a uniform phonetic system in his admirable book. "I meat eat" illustrates a very common form of expression in Mexican. I admit that the dropping of *tl*, the termination of *nacatl*, meat, is an argument in favor of the theory of incorporation, but there must always be an interval, be it ever so slight, between the noun object

¹"Introduction to Hale's Indians of Northwest America," *Transactions American Ethnological Society*, 1848.

and the verb, and the thematic noun in Mexican had a general collective quality like the Greek neuter, as for example Azteca from Azteca-tl the singular. This hiatus is distinctly marked at times as *calli* house, but no-*calh*, my house.¹

Mexican grammarians say that these clippings, as the *tl* of *nacatl*, are made largely for purposes of brevity and euphony. But they always occur at a natural cleavage point, if we assume an original agglutination of particles. They cannot be compared at all with such mere mechanical devices as the *t* in the French sentence: A-*t*-il fini? I think the cause of this usage lies farther back than brevity or euphony. Savages had plenty of time to pronounce entire words and were like ourselves scarcely conscious of euphony.

In Cree the noun incorporates an objective pronoun-*postpositive*, as: *móokooma*, knife; net oo-móokooman-*in*, I have a knife.² But the Aryan verb incorporates its pronoun *subject*, as leg-o, I read.

Professor Sweet says, furthermore, that *ni*, in *ni-nacaqua*³ is additional evidence of incorporation. Why? It is true that it is always printed so, and *ni* is called inseparable by the grammarians, while *ne* and *neuatl* are called "separable" forms for the pronoun *I*. The question is merely one of sounds which coalesce readily or the contrary as the case may be. "Igo," "yougo," might look like incorporation or synthesis, while "one goes" and "Edward goes," would remain analytic. There are cases where *ni* does syntactically stand alone; *ni-tlatoani* is an example. In such cases the copulative verb *be* is omitted universally in Mexican. Inserted, it would read *ni ca*

¹ Olmós, *Grammar Nahuatl*, p. 200.

² Howse's phonetics are English; "Italian," net u-múkuman-*in*.

³ Sweet, *History of Language*, p. 70.

tlatoani, I am a chief, though this would not be correct Mexican since *ca* is not properly *be*, but the Spanish *estar*.

Mexican syntax is synthetic, not incorporating. Its postpositives are as readily detached as is *ward* in the English word *homeward*. But it is by no means so complex in grammatical structure as is Algonquin or Japanese, for example. The opinion of Clavijero previously referred to, who found it capable of expressing every mystery and subtlety of the Christian religion without borrowing a single word, is surely a strong testimonial for its power of expressing sustained thought.

Agglutination.—A few lines will suffice for this subject. I mention it here partly to render my book symmetrical but chiefly to show that Mexican is *not* agglutinating. All the earliest systems of writing appear to have been syllabic. Sanskrit and Japanese are so today, as well as Cherokee in the United States. The following sentence from King's *Assyrian Grammar* will illustrate the system of syllabic writing; the hyphen separates syllables, the words are spaced: *i-na di-ma-a-ti a-lul pag-ri-su-nu; ina dimati alul pagri-sunu*; on poles I hung corpses-their. Stratonike (wife of Antiochus Soter) is spelled (in Assyrian) *As-ta-ar-ta-ni-ik-ku*; Antipatros, *An-ti-pa-at-ru-su*.

The repetition of a vowel did not necessarily mean it was to be pronounced twice. Remember the unit was a syllable instead of a letter. Thus *di-ma-a-ti*, simply spells *dimāti* with the *a* long. This system of writing is perhaps an additional evidence of the agglutinative character of all languages at first. Turkish is a good example of an agglutinating language. It tacks on particle after particle in a most astonishing fashion. Here is an example: *Sev* is the root-word for love; *sevmek* is the infinitive to love;

sevmemek, is not to love; *sevehmemek*, is not to be able to love; *sevdermek*, is to cause to love; *sevdirmemek*, is not to cause to love; *sevderehmemek*, is not to be able to cause to love. In this linguistic sandwich the infinitive is practically expanded into a sentence.

Classification.—Just what fixes a language in a given class is not easy to tell. In fact there is no exact line which divides any one class from any other class. Languages constantly defy classification. According to Max Müller a Turanian language should be, not only agglutinating, but terminational. But the Rev. H. Roberts inclines to class Khassi as an agglutinating language and says that its particles are without exception prepositive. For example, the verb *lait* means free; *pyl-lait*, to make free; *jing-pyl-lait*, freedom or liberation. Yet this ancient language seems to be Turanian according to Mr. Roberts, though it would appear, from the example, to be monosyllabic, rather.¹

Since the American languages are classed as incorporating it may be interesting to compare a Selish (Flathead) verb with the Turkish. *Tneskoli*² (operator) to do, to be busy, is the primitive; *kol* is the root; *tneskol*, the form in composition; *ieskolm*, active causative, I advance a thing, I do; *tnesklkoli*, reduplication, I do several things; *tneleskoli*, iterative, I do it again; *tneskolmluisi*, frequentative, I do it frequently; *tneselkok'li*, diminished action, I work lightly or easily; *kaeskolstegui*, reciprocal, we work to our mutual advantage; *tneseskolmisti*, reflective, I fashion myself; or *tneskolsuti*, I work for myself.

¹ Khassi is classed by Mr. Roberts in the indefinite group, "Sub Himalayan." He estimated that it is spoken by about 250,000 people who inhabit an isolated district of Assam. The language has only lately been reduced to writing. [Actual population, about 175,000.]

² *Tnes*, pronounce *tenés*. *Kol* is possibly identical with Sanskrit *kar*, to make, to do; compare the Turkish *sev* with Sanskrit *sā*, to generate; Mexican, *tla-ço-tla*, to love.

Monosyllabism.—Monosyllabic languages or isolating languages may be adequately represented by Chinese, in which every word is theoretically a monosyllable. Some of these primitives are also idea words, that is, they express an idea in themselves as *jin*, a human being, but specifically, a *man*; *fu-jin* is woman, and *ur-jin*, child. Hence most Chinese words logically are not monosyllables. The early use of arbitrary ideographs or characters instead of a flexible alphabet, has arrested the development of Chinese and fossilized the language.

Prof. Henry Sweet in speaking of Chinese syntax makes some statements (also made by others) which lead to conclusions I am unable to reach. I should like to copy them in full, but can only give the substance here.¹ He dismisses peremptorily (and properly) the notion that Chinese is an analytical language which has outstripped even English in freeing itself of inflections and returning to a monosyllabic state. He further says that there exists indisputable internal evidence in the language itself that it was once polysyllabic. These two statements appear to me contradictory. If the Chinese was once polysyllabic, it is safe to assume that it had for "relation" signs either the system of terminations known as *inflection* or the other system known as *postpositive* which is, after all, a species of inflection. In fact Chinese employs in practice, both *prefixes* and *affixes* today, which are in no way different in function from similar particles in Magyar, Assyrian, Mexican, and Japanese, instance *ti*, the genitive sign in Chinese, or *mun* the plural sign. *Ti* is employed in the same way in Assyrian and Mexican, and is our English *ty*. In fact such particles whether separate or agglutinated are absolutely necessary to every language. For example,

¹ Sweet, *History of Language*, p. 74.

tsai means *in, on*; *nüi*, *interior*; *wai*, *exterior*; *tsai fang-tze nüi*, *inside the house*; *tsai fang-tze wai*, *outside the house*. Along with the idea-words, like *boy, dog, wheat, book*, there must be relation or form-words like the Chinese *ti*, the English *of*, the Mexican *co*, or the Japanese *ga*, the sign of the nominative case. It seems impossible that Chinese could ever have been polysyllabic. Some vestiges of the system would surely remain such as *ward*, in the English word, *homeward*.

The basis for this theory of the former polysyllabism of Chinese lies in the fact that certain letters have disappeared from Tibetan words within comparatively recent times.¹ Tibetan is a monosyllabic language, in the class with Chinese and certain letters in literary Tibetan are silent. Contemporary Chinese inscriptions indicate that they were sounded in the sixth century, A. D. It is said that in certain parts of the country they are still pronounced. W. D. Whitney holds this as important if proved true and it appears to be true.² But a particle may perish without affecting the monosyllabism of a language, and it seems to me the cases are not parallel. Suppose, for example, the Chinese sign "*ti*" of the genitive case should become useless through juxtaposition or some other device which rendered *ti* superfluous. Then *ti* might perish, first the vowel, the *t* lingering for awhile as a useless silent letter, a parasite on the head word, until it, too, would disappear. Take our English possessive, "John's book," once "John his book." It would be a parallel case to say that *s* was once a syllable of the word John's. If the case were to go a step farther, and sometime in the future the posses-

¹ According to A. H. Sayce, Chinese has undergone serious phonetic decay (*Assyrian Lectures*, p. 153). Max Müller, however, maintains the contrary, *Science of Language*, Vol. I, p. 50.

² Cf. Keane, *Ethnology*, pp. 207 ff.

sive were indicated by an adjective, "the John book," the philologist of that day might claim that English never had any other but the adjective possessive. Lacouperie appears to have proved beyond doubt that Tibetan now monosyllabic was once polysyllabic.¹ Hence the inference that the same thing has occurred in Chinese. But admitting this fact we have only illuminated a *period* in linguistic development. The *beginning* and the *end* in the growth of language can never be positively determined. Granting that a language is now monosyllabic, English is nearly so, in the past it may have been polysyllabic as we know English to have been, and we also know that English was originally built around *monosyllabic* Aryan roots which we dare not ignore simply because we cannot account for their origin or assign a date to their beginnings. Tibetan has apparently undergone some extraordinary phonetic changes, and the same may prove true of Chinese, but I know of no adequate scientific study of Chinese phonology and its history, which will decide the matter.

Inflection.—Inflecting languages are, for example, Sanskrit, Greek, Latin, French, Italian, Spanish, and German. They are so well known as to need no special treatment here, beyond the remark that the conjugation of the Mexican verb (p. 62) places that language indisputably in the inflected class. Other American languages belong there. For example, Chippewa is a marvel of inflection, beside which ancient Greek is not difficult, and its vowel changes are developed harmoniously and symmetrically.

For a long time the tendency in human speech has been to discard *synthetic* forms for *analytic*. Thus instead of expressing the pronominal idea in the verb ending as in

¹ See article "Tibet," *Encyclopaedia Britannica*, by A. Terrien de Lacouperie. Also Vol. XVIII, pp. 774, 779, article "Philology," by W. D. Whitney.

Latin leg-o, I read, we say in English "I-read." The Roman youth said to his sweetheart, *amo te*, I love you. There was no need of the analytic form *ego amo te*, unless he wished to be emphatic. Both forms of expression have their advantages. The analytic is simpler but the synthetic may be very concise and expressive. The inflectional method required the memorizing of such a multitude of forms built upon the same root that it seems incredible that the unlettered could have recognized all of them as cognates. It is more probable that to most people they were, in their disguised aspect, separate forms. For example, would it not require a scholar to analyze the Sanskrit compound *Hitopadeṣa*, "given for instruction" as derived from *dhā*, to give + *upa*, for, + *diṣ* to point out, guide instruct? It surely would. Did the illiterate Greek recognize the root *θαν* in *τεθνώτος*? It is to be doubted.¹

The relative merits of the two systems may be briefly shown in a conjugation of the present tense of the verb *speak, talk*, in five languages.

	LATIN	
dico, I speak		dicimus, we speak
dicis, thou speakest		dicistis, you speak
dicit, he speaks		dicunt, they speak
	ITALIAN	
parlo		parliamo
parli		parlate
parla		parlano

Both Latin and Italian, as may be seen, have *six* distinct forms and pronouns are not necessary.

¹ In this connection I may suggest that grammar existed and was taught long before the art of writing was in existence. How else could such involved tongues as Greek, Sanskrit, Quichua, and Chippewa have been preserved from corruption and final dissolution? It is said that the aborigines of America gave their children at an early age careful instruction in grammar. *Hand Book of Indians*, Vol. I, "Education," p. 414.

GERMAN	
ich rede	wir reden
du redest	ihr redet
er redet	sie reden
ENGLISH	
I speak	we speak
you speak	you speak
he <i>speaks</i>	they speak

German has *four* forms out of a possible *six*. English has but *two* forms, a veritable pauper, and, since pronouns are necessary, it might as well have but *one* form.

MEXICAN	
ni-tlatoa	ti-tlatoa
ti-tlatoa	anmo-tlatoa
tlatoa	tlatoa

Here there appears to be but *one* form, but there are really two since the lengthening of the final vowel of the plural to distinguish it from the singular is really inflection. It will be observed that the *third person* singular and plural has no pronoun, a feature which is frequently found in Indian languages.

Inflected speech was undoubtedly built up in the first place by the gradual agglutination of independent significant particles. But when these particles began to lose meaning to the masses of the people and a host of forms¹ required precision in grammar and nicety in pronunciation to avoid equivocation, and the old process began over of piecing out the meaning with other words which became finally auxiliaries, adverbs, or prepositions.

Unity of human speech.—The reader has doubtless observed in these pages from time to time, that the origi-

¹ The possible number of mutations of a Greek verb was about 570; of a Latin verb 171. I quote from memory, having lost my reference. I confess the total surprised me.

nal unity of human speech is tacitly assumed though nowhere directly asserted. Positive declarations on this subject are hazardous. The prehistoric period of man's development is, in all probability, of very much longer duration than the historical. To postulate prehistoric speech is impossible. It is also very difficult for the ethnologist to explain scientifically the differentiation which resulted in such extreme physical and mental types, as the negro and the white man exhibit. It is possible that a branch of primitive man may have for many thousands of years remained stationary in Africa, while his more favored brethren advanced steadily to the high intellectual standing of the Aryan nations. We have seen how languages may exist unchanged for great periods of time, and a like arrest of physical and mental development may be assumed as not unreasonable.¹

Persistence.—This may be a fitting place to refute the nonsense so often repeated about the rapid changes in the languages of America. I have read repeatedly that the vocabulary of these languages may change so rapidly as to render the tongue unintelligible, within a lifetime. In that case the grandfather could not converse with his grandchildren with any satisfaction. I call this plain nonsense; it might take a stronger term to express the case properly. We have seen that it takes hundreds of years to make material changes in syntax, and we have seen that syntax is no more enduring than word forms. Anyone who will study the words father, mother, house, fire, cow, dog, will at once realize their great antiquity. An exception to this statement may be made in the case of some non-Aryan tribes for special reasons. John

¹Finnish has remained practically without change for 1,600 years; Sweet, *History of Language*, p. 118. Also see statement of Joseph Edkins, footnote 3, p. 17.

Fraser, in "An Australian Language," says that the aborigines of Australia were accustomed to cease using any word found in the name of a dead man, immediately upon his death. If a man were called "Fell in the Water," a new word must be found for water after his demise. The reason of this curious fact was that they believed a mention of the name of the defunct, would disturb his spirit, which was capable of harming the living.

Phonetic changes.—One fact will surely arrest the attention of every observant reader. There are usually two or three words for the commonest things. This might appear to be in favor of the argument that language had original development from several independent centers, and that a subsequent mingling gave the multiplication of words like *tlacatl*, ἀνὴρ, ἄνθρωπος, *mas*, *homo*, *vir* for man; *deus*, *bog*, and *god*; *viç*, *chan* (*kshem*, *ham*), *cal*, and *cab* for house. These independent words might have been scattered and commingled by the incessant migrations of mankind and the mingling of different races through wars and conquest. But the fact that these roots do not appear to be in the least localized, as, for example, *pilli*, boy, found in Assyria and Mexico, would seem to indicate that all mankind were one, until after definite articulate human speech was firmly established.¹ But very strange permutations may occur through phonetic changes. Thus Fraser derives *ka*, eat, and *edo*, eat, from the same root, *k* and *t* being equivalents.² The three words given here for *god*, for example, are really not roots. They are probably all derivatives.

¹ There are Hebrew roots in Khassi which the presence of Arabic will not explain. Introduction to *Khassi Grammar*, by H. Roberts. The Ainu of Japan have been shown to be Aryan in speech by Rev. John Batchelor, *The Nation*, September 12, 1907, "Notes."

² *An Australian Language*, Introduction.

These independent forms may all have been developed in the same community through figures of speech. But figurative language, as a rule, is plainly traceable to its origin, and simile is usually more verbose than the original, as: "ship of the desert," a camel; "king of beasts," a lion; "lord of creation," man. When we read that the Arabs have some fifty words for camel, we must allow for the imagination of the writer, as well as of the Arab. In fact Tien gives but three; *naqa(t)*, *ebī*, *jamāl*. Sacroug gives two: *gamāl*, *naka*, a she-camel, and *naca-tl* is the Mexican word for meat.¹ (The *g* of Egypt is *j* in Syria.)

Max Müller, in a moment of doubt, practically asserts that we have no right to say that the Latin *quatuor* is a cognate of the Sanskrit *catúr* (four), or that the Greek *tettares* is in any sort of relationship to either, and he names other examples to support his idea of the moment. But there is an explanation that is convincing for the relationship existing between *catúr* and *quatuor* (see "Phonology," chap. xi). Phonetic laws apply uniformly, and operate through long periods of time, but not in every case. We must recognize phonetic "sports" just as we recognize sports in plant life.

A novice in comparative philology would scout the idea that any relationship exists between Aryan *ekwo*, the Sanskrit *açva*, horse, the Latin *equus*, and the Persian *asp*. But the laws of phonetics incontestably prove a common origin. If we were to place in the same category "hack," "whoa," and "get up," a smile would be excited, and yet they are perhaps all from "*açva*," *hack* being the first syllable and *whoa* the last. *Whoa* is said to be a "horse call" from China round the globe to

¹Gabriel Sacroug, *Traveller's Interpreter, or Arabic without a Teacher*, Cairo, 1874.

California. In parts of France people say "üp" for "get up," the Utes of Colorado say the same. The latter phrase probably should be "get ep." No farmer says "get up" until after he has passed under the influence of the pedagogue. The real meaning then was originally doubtless "get horse," "go horse," since "up" (ep) may be traced through *hippos* to the same source. I have thought this paragraph worthy of print even though it have no better warrant than "travellers' tales."

If we assume the unity of human speech, as we doubtless shall be obliged to do in the future, we may then be justified in assuming word relationships which cannot be proved absolutely by any known laws of derivation.

CHAPTER XI

PHONOLOGY.—General Remarks—Vowels—Dentals—Gutturals
(the *kg-q* and *kg-s* Sound shifts)—Vocalic Consonants—
The Place of Mexican—Labials—Line of Descent and
Assimilation—The Saltillo.—Accent.

General remarks.—Heretofore I have given no more attention to phonetics than what I deemed necessary to explain the case in point and to support the thesis which is the common origin of the Mexican and the Indo-European group of languages. The remarks in this chapter are merely a brief sketch of elementary principles, since phonology is, in itself, a subject sufficient to fill a large volume.¹

We have all doubtless wondered at the formidable compound consonants of Sanskrit, Greek, and Arabic, such as *kh* in *khedive*, *sheikh*, *bh* in *bhagava* and combinations like *phthisic*, *pteron*. It is not easy to say always just how the ancients pronounced these combinations. One thing is reasonably sure, none of the letters were silent. In *bh* the *h* may have been a full aspiration or the briefest possible stop and not a distinct aspiration like our English *h*. Arabic *kh* is neither *k* nor *h* but both. I confess that I cannot pronounce it exactly as an Arab does. It is a very deep guttural, harsher and more throat filling than German or Scotch *ch*, or Spanish *j*. Ask a German to pronounce *knabe*. You will notice that he brings out the *k* distinctly with a suggestion of a vowel between the

¹See the author's *Mexican in Aryan Phonology* and Gray, *Indo-Iranian Phonology*, for special information bearing on the subject of this book, also Tolman, *Old Persian Inscriptions*.

k and the *n*. There appears, however, to be no trace of a vowel in the Arabic *kh* as there is in *knabe*. *Pteron* was once **p^{eteron}*; *phthisic* was probably **ph^{ethisic}*.

As man became more civilized, there was doubtless a tendency to tone down speech and simplify harsh compound combinations. Arabic and Quichua are still marked by harsh consonants. The guttural-palatal series is today, in most languages, *g*, *k* (*c*), (*h* a survival), German *ch*, *j*. The labial series is *b*, *p*, *f*, *v*, *w*. The dental series is *d*, *t*, *th* (in *thing*), *th* (in *that*). The liquids are *l*, *r*. The sibilants are *s*, *z*, *ts*, *tz*, *zh*, *j*(*dzj*), *ch*, *sh*. The nasals are *m* and *n*.

The general tendency, apparently, is to crowd sounds forward in utterance, especially in American languages. Thus Mexican has lost *g* entirely; *k* only remains. The Sanskrit *ç* (once *k*) becomes: *c* (*k*), *ch*, *s*, *sh*, *x*, in Mexican. Apparently an impulse for an easier sound has dropped *b*, beginning the series with *p*, so that the series consists of *p*, *u* sometimes, which is zero in the series. Of the liquids, *r* is either lost or becomes *l*, and *l* is never initial. In the dental series, Mexican has lost *d* and *th*, only *t* remains, but Sanskrit *d*, *dh*, become *ch*, *dhi* = *chi*, palatal or sibilant, and it may be that *t* also becomes a sibilant or the equivalent *ch*.

But there is no synchronological uniformity in consonant mutation, exhibited in the languages of the world. Grimm's law is of universal but not uniform and synchronous application, hence it must not be strained because the same language may offer side by side words which do not conform as Greek *κῶς*, *πῶς*.

But we see Mexican losing *g* entirely, which English retains in full vigor. Aryan *k* becomes *h* (*ch*) in English as *c^vanis*, dog, English *houn-d*, but we have English *chin*

and Mexican can-tli. English is older in one respect than New High German, having one less "sound-shift."¹

The post-consonantal "aspiration" of Sanskrit is lost in most of the other Aryan languages, or more properly speaking, it is peculiar to Sanskrit, and is less often found in Greek as: bhar, carry; phérō, Greek; fero, Latin; bear, English; Mexican, pal; bah, *bagh, Greek, πᾶχος; Mexican, ua-paua; English, bough; bhratr, brother; phrātēr, Greek; frater, Latin; bruder, German; dih, *dhigh, rub; Greek, θίγω; Mexican, ta-taca, scratch; English, dough.

As to vowels, the Mexican is rich, in fact nauatl means sweet-sounding, while English is, to say the least, not a euphonious language and is, to tell the truth, weak in vowel sounds chiefly because it has largely banished diphthongs, properly speaking.

Elements of phonetics.—In the rudimentary principles offered here, I do not pretend to do more than set down the facts necessary to a proper comprehension of this work. Without these explanations, my book might, in places, seem inconsistent and confusing. For exact classified treatment of the subject read *Mexican in Aryan Phonology*.

Vowels.—Vowels are unstable; *a* in one language may be *au* = *o*, or *ai* = *e* in another language, or in a derivative in the same language; *u* and *o* are constantly changing places; *a* may become *e* or *i* as: agni, fire, Sanskrit; ignis, Latin; English, ingle-side. Vowels and roots are frequently strengthened. For instance *ma* in Sanskrit is strengthened to *man*; *lip*, Greek, to leave, becomes *leipo* in the present tense; *venir*, Spanish, come, becomes *vengo*, I come, *viene*, he comes. The real stem may always be traced somewhere, as in *élipon*, the aorist of *leipo*. Old

¹ "Sound shifting" may swing around a circle and finally reach the starting-point.

Aryan is known to have had the vowels *a*, *e*, *o*, and *i*, *u*, which two latter were much employed in the formation of diphthongs. Sanskrit lost a large part of its vowel heritage and became a monotonous *a*-language.¹

The equivalence of vowels and diphthongs existing between Mexican and Greek and Sanskrit is exhibited in the following table:

Mexican.	<i>a</i>	<i>e</i>	<i>i</i>	<i>o</i>	<i>u</i>	
Sanskrit.	<i>a</i>	<i>a</i>	<i>i, a</i>	<i>u, v</i>	<i>vu</i>	
Greek...	<i>a, ε, η, o</i>	<i>ε, α, η</i>	<i>i</i>	<i>υ</i>	<i>φ</i>	
Mexican.	<i>iu, yu, yo</i>	<i>ui</i>	<i>ua</i>	<i>uii (u)</i>	<i>ai</i>	<i>eo, eu</i>
Sanskrit.	<i>u, yu</i>	<i>vi, va</i>	<i>va, (r)a, (x)a</i>	<i>u, (vi), iv</i>	<i>ē</i>	<i>au, a(x)</i>
Greek...	<i>υ, *jυ, ζυ</i>	<i>φοι, φι, υι, υ, ω</i>	<i>φα, α</i>	<i>υι, *jυι, υ</i>	<i>αι</i>	<i>ευ</i>

x indicates a missing *labial*.

The pseudo-labial *u* performs a vicarious service: (1) it may represent a *labial*; as Mexican, *auh*, also; Sanskrit, *api*; (2) a lost *g*; as Mexican, *uapaua*, get rigid; Greek, *παχ-υς*; (3) a lost *r*, as Mexican, *nauatl*, clear; Indo-Iranian, *nal*; Mexican, *naua*, dance; Sanskrit, *nrt*.

The vowel *i* (*y*) may represent a lost *r* as in *quiyauitl*, *ghr*+*ab*; Sanskrit, *rishi*; Pali, *isi*. The change of *b, p*, to *u* is of very wide geographical reach, as: Mexican *kauh*, ape; Sanskrit, *kapí*; Pali, *vuddho*; Sanskrit, *buddhá*. The same is true of *u=r, l* as: Mexican, *xau-a*; Latin, *col-or*; Old French, *échauder*; Latin, *excaldere*, scald. The change of a *palatal* to *u* appears to be Indo-Iranian, as: Mexican, *ua-paua*, *παχ-υς*; Panjābi, *nēul*; Sanskrit, *nakula*.

The *vocalic* system of Mexican lies *between* Greek and Sanskrit.

Dentals.—Old Aryan had the dentals *t, th, d, dh*. Philologists say they were more truly dental than in

¹For a brief discussion of the primitive Aryan vowel system, cf. Professor A. S. Wilkins, *Encyclopaedia Britannica*, "Greek Language," Vol. XI, p. 127; Professor E. Sievers, Vol. XVIII, p. 788; *Mexican in Aryan Phonology*, pp. 7, 8. Also, Pezzi, *Aryan Phonology*, p. 51.

English, the tip of the tongue being pressed against the teeth in utterance.

Gutturals (eastern and western), the kg-q and kg-s sound shifts.—There were two sets of back consonants, palatals and gutturals, and these were aspirate or non-aspirate: thus *g, gh, k, kh*. This subject is rather abstruse, but each of these series was again classified as pure palatals and labio-velars, those which had an accompanying parasitic *v* as *gvarm*, warm; *kvos*, what. The palatals divide into an *s-series* and a *k-series*, the *s* being *eastern* and *k, g* or *h, hw*, the equivalents, *western*. *K* becomes *ç* (*s*) in Sanskrit, as in *çvan* (*svan*), dog; and remains *k* or *h* in the western tongues and partially in Mexican; as, *κύων*, dog, Greek; *canis*, Latin; *hund*, German; *itzcuin*, Mexican = *skuin. Clallam is *skaha*; Snake, *sharay*.

It is necessary to understand these sounds else you cannot see the connection between Greek, *κύων*, German, *hund*, and English, *hound*; Mexican, *calli*, house; Old Persian, *kal'a*; Sanskrit, *çala*(?); Romany, *kher*, *khel*.¹

The labio-velars, through the influence of this associated *v* or *w*, became in western tongues: *p, b, f, w, v*, as: **g^varm*, Aryan, warm; *gharma*, Sanskrit; *formus*, Old Latin, warm; Germanic, cognate, burn; Greek, *thermós*.

Catúr, four, Sanskrit; *tettares*, Greek; *chetuire*, Russian; *quatuor*, Latin; *pedwar*, Welsh; *fier*, German; *four*, English. Here we have for Aryan *k, c* in Sanskrit, *ch* in Russian, *t* in Greek, *qu* in Latin, *p* in Welsh, and *f* in German.

Aryan **k^vo-s*, who, what; Sanskrit, *kas*; Ionic, *kōs*; Attic, *pōs*; Latin, *quod*; English, *who, what*; Mexican, *cuix*. Generally, then, the eastern languages have palatals,

¹ When I speak of distinguishing these sounds I do not mean that you must understand the cause of such changes. No one can say truthfully that he can explain the subtle causes of phonetic change.

an *s*-series, and a *k*-series. The eastern, *s*-series (ç) appears in the west as *k*, as Sanskrit, çatam, hundred; Lithuanian, szimtas; Latin, centum (kentum); Welsh, cant; English, hundred. The labio-velars of the east change in the west to *q*, *qv*, *hw*, or a *labial* as *four* and *what*. This change should not occur in Mexican. *Uentli* an offering is from Sanskrit, *hū* **ghū*; Latin, *fu*-t-is; *uitztli*, thorn, from German *gerste*.¹ But Pimentel employs a parasitic *v* as in *kvalloth*, beauty, *καλόν*, for which I find no phonetic warrant (see p. 99).

But some philologists contend that the entire subject of human speech-sounds is too little understood to be dealt with conclusively, because up to the present time, investigation has been confined largely to Aryan sounds. Since the organs of speech appear to be the same among all tribes and colors of men we may naturally expect the same phonetic changes to occur. In fact, general phonetics are the same, and to make exceptions of the American languages, as some do, is unsound philology. When universal philology has been written we shall hear no more of this bugbear.

The "continental" pronunciation which is employed in this book, is also known as the Italian. In Mexican, *h* is simply a device to indicate the nature of vowel sounds; thus Anahuac is pronounced A-ná-wac, not anawhack. For this reason *h* is seldom used except with *u*, which it may precede or follow.

Vocalic consonants were common, apparently in Aryan. Now, practically only *r* and *l* remain and they are confined to Sanskrit. These sounds have occurred so often in the body of this book that it was deemed necessary to explain their character as they occurred, hence no repetition is

¹ Cf. *Mexican in Aryan Phonology*, Tables C, D.

² Modern Khassi admirably illustrates these sounds: bh=b-ha; kh=k-ha; dh=d-ha; gh=g-hi; ph=p-huh; rh=r-hem; th=t-haw; Roberts, *Khassi Grammar*.

necessary here, beyond the general statement that a vowel sound, more or less distinct, accompanies them, as: ʀ (ar), rise, go, fit, ʀnóti, ártá, ʀtá.

There was also a vocalic *n* in Aryan as, *tntó*, stretched. Other languages insert a vowel with or without the *n*, as Greek, *tatós*; Latin, *tendere*; Mexican, *tentli*.

The place of Mexican.—With regard to the split *k-s*-sounds, Mexican seems sometimes to stand with the east and again with the west in *çvan*, Sanskrit; *canis*, Latin; *itzcuintli*, Mexican (*itzc* or *izc* = *sk*).¹ Here it is old Aryan rather than eastern or western, but *kas*, Sanskrit, (and *cuix*, what, Mexican?) are both eastern, while *what* and *quod* are western. An anomalous change of Sanskrit *rt* to Iranian *sh* appears to occur also in Mexican; as Sanskrit, *ártha*, property, goods; Pákhto, *ashya*; Mexican, *ash-ca*, as *n'axca*, mine, that is, my property; Zend, *asha*. Sometimes *t* is dropped as: Mexican, *naua*, to dance; Sanskrit, *nṛt*; Hind., *nautch*.

Strengthened roots have been dealt with already. Sometimes an *m* or *n* infix occurs as *lab*, *lambánō*, Greek; *conjugate*, *conjunction*; but this device is seldom found in Mexican.

Initial *m* and final *n* are sounded very faintly in Mexican. *Mexica*, Mexicans, is pronounced very nearly *exica*; *totolin* or *totoli*, hen. *Ch* is the Spanish *ch* as in church, except in such a position as in the word *opochtli*, when it is practically *sh*. *X* has the sound of *sh* or *ch*.²

Labials.—It is a remarkable fact that of the entire labial series of consonants, *p*, *b*, *v*, *w* (*u*), the Mexican has lost all but *p*, *u*. Olmos, however, asserts that at the time

¹ For phonetics see *Mexican in Aryan Phonology*.

² The history and exact character of this sound is not clear. Olmos says, *Grammar*, p. 198, that it should be sounded like *x* in Latin *divi*. The Spaniards pronounce it like *j*, German *ch*, but Pimentel says it resembles initial *ch* but is not the same.

of the conquest, the Mexican women often employed a *w-sound* where the men uttered the *u(oo)-sound*. It is an unaccountable fact that *b* was very rare in Old Aryan.

G is missing from the Mexican, which would indicate a forward movement of sounds.¹ This general decay of *g* is wholly different from such a case as **gvarm*, English, warm. Here the loss of *g* may be attributed to the influence of the accompanying semi-vowel, *v*. There must have existed a slight tendency toward uttering a *g*. Olmos says at times the natives *appear* to pronounce a *g* but that in his opinion the real sound should always be *c* (*k*).²

Line of descent and assimilation.—It will be seen from this short discussion of phonetics, that consonants very seldom *cross* a series. The change, if any, is to another letter in the same series; in other words, once a labial, always a labial. Thus the Sanskrit, *pāna*, drinking, becomes Mexican *tla-uana*; *duhitṛ* becomes *tiuhtli*, both dentals. *Water* and *atl* stand side by side. Mexican having dropped the *v* which Greek, did universally. How *four* can be *catūr* in Sanskrit and *quatuor* in Latin and *fier* in German, has been explained under *k-sounds*. But the Greek *téttares*, four, may be termed a phonetic “sport” though *k* and *t* are sometimes interchangeable, regularly so, in Samoan and Awabakal.³

M and B.—Some philologists contend that *m* is a regular substitute for *b*, in natural course of phonetic change. This view finds corroboration in Tupi-Guarani, where *mb* and *mp* are common initial consonants as in *mboe*, to teach.

Arabic.—The *t* in such words as *naka* (*t*), she-camel, is in a “constructive position.”

¹ For an interesting discussion of the forward movement of sounds, see Sweet, *History of Language*, p. 32.

² Olmos, *Grammar Nahuatl*, p. 197.

³ See Sweet, *History of Language*, p. 29; also I. L. Threlkeld, *Grammar of Awabakal*, ed. John Fraser.

Assimilated consonants.—Frequently a letter is assimilated with a following letter. (*recessive* assimilation). This is especially true in Latin as *scala*, **scad-la*; *terra*, **tersa*. The same occurs in Mexican as *can çe*, *caz çe*; *ma tiquin-xox*, *ma tiquix-xox*, do not fascinate them. There is also *progressive* assimilation, as *buddhá* for *budh-tá*.

Accent.—The accent in Mexican usually falls on the penult. In vocatives on the ultimate, as *totatziné*, oh our father! But the shortening of words as used with possessive pronouns causes a stress which is not properly accent, as: *calli*, a house, *nocalh*, my house.

The saltillo, little leap, is a feature of Mexican pronunciation which appears to be aspiration. It is fully described by Chimalpopoca. Some authors say it is a pedantic nicety which may be ignored altogether.

Dialects.—In some instances Mexican seems to follow Sanskrit very closely as *kapi*, ape; Mexican, *quauh*; *cihuatl*, woman; Sanskrit, *çiva*. Again it seems to be nearer the Avestan. Thus *mauiço*, wise, great, learned, may be derived from *mag*, Sanskrit *manh*, by dropping *g* and filling its place with *u*, a common Indo-Iranian change. But this requires Aryan terminal *s* which is not Mexican. Or it may be derived from the same root following *Avestan* analogy where *g* becomes *s*; or Sanskrit *g* to *j*, Mexican, *ch* or *x*; thus *mauiço* = *magian*, by the change to *s* and the introduction of adventitious vowels.¹ A parallel case as to vowels is *kṛnóti*; Avestan, *kerenaoiti*. After the Avestan, Mexican *yauiz-teca*, to set up a shrine, *iyaua*, is from *yaj*, to worship; Greek, *ἀγιάζω*, to consecrate. The Hindustani word for *magi* is *majus*; for *magic*, *'azimat-khwānī*. The Mexican compound verb *azi-ca-mati*,²

¹ Whitney, *Sanskrit Grammar*, sec. 219; *Mexican in Aryan Phonology*, p. 10.

² *Azi* is phonetically serpent, *ahi*, "serpent wisdom;" cf. Zend, *Azhi dahāka*.

means to be wise, to know perfectly. The identification of magian with mauico thus seems to be indisputable.

These Indo-Iranian dialects seem to have run amuck in verbal forms. The Sanskrit for mongoose is *nakula*, the Panjābi is *nēul*. The Sanskrit, *pācati*, means to cook; Avestan, *pacaiti*; New Persian, *pazad*; Afghan, *paxa-vaul*; Kurd, *patin*;¹ Mexican, *pahua*.

The loss of a final *palatal* is pan-Aryan, as: Pali, *manam*; Sanskrit, *manak*; Greek, *θυγάτηρ*; Sanskrit, *duhitṛ*; Mexican, *tiuhtli*; English, *dauter*, *daughter*.

Since the Nahuatl consisted of several tribes it is natural to suppose from these comparisons that they brought with them to the New World some of their peculiarities in dialect.²

Mexican phonetics are Spanish of the sixteenth century. The system is arbitrary, contradictory, and full of absurdities. The verb *qua*, eat, is also *cua* (Sanskrit, *gr*, *gras*? *de-vorare*?); *uei*, large, or *huei*; *Nauatl* or *Nahuatl*. The same word may be spelled with *ch*, *x*, *z*, or *s* at the caprice of each writer. The vowels *o* and *u* are often equivalents, as *teotl* or *teutl*, god.

For initial *s*, Mexican employs *ç*; as a rule for medial *s*, *z* is preferred, but a MS of 1607 everywhere employs *s*.³ But Chimalpopoca (1879) employs initial *z* for *s* and discards *ç* entirely. In fact, the utmost confusion exists as to *s* and *h* and no writer seems to be uniform with himself. I may as well confess that I, too, have not been uniform, but not carelessly. I have often dropped *h*, which is a clumsy makeshift, and in such words as *uetzca* it is misleading to English readers who would pronounce the word *whetzca*.

¹ Gray, *Indo-Iranian Phonology*.

² *The Congress of Orientalists* announces (1908) the discovery of an extinct Aryan language in Chinese Turkestan which is said to be *western*.

³ *Los Reyes*, Nahuatl text, miracle play of Tlatelulco, Chicago Public Library.

CHAPTER XII

MEXICAN NOTATION.—The Five-Base—Chica ce, 6—Ten—The Fifteen-Base—System Aryan—"Hand Counting"—Antiquity.

The Mexican numeral system and the Aztec calendar¹ are of such importance that they deserve a thorough discussion but the subject can only be mentioned here. The Mexican cycle consisted of 52 years, and at the end of which occurred the ceremonial of "binding up the years," mo'lpilli in xiuitl. All fires were extinguished, the people rent their garments with lamentations and the sacred fire was rekindled on the breast of a living victim upon a mountain top. When the fire was rekindled² swift runners distributed it to the people of Anahuac and rejoicing succeeded the period of gloom. When the Spaniards landed in the country, they were surprised to find that the Aztec calendar was practically correct in actual date, while their own was several days behind time. The year contained 18 months of 20 days each, with a supplementary period of 5 days. Both days and months had specific names.

The method of counting was vigesimal, that is by 20s.³ The names of the numerals up to fifteen are, in my opinion, pregnant with facts regarding the genesis of numeration. *Five, ten, and fifteen* have special names unlike those of the true Aryan system. They will be referred to later.

Tupi has a word which Ruiz de Montoya in his dictionary defines as "10 or 11." Çata, one hundred, in Sanskrit

¹ For the Aztec calendar see Prescott, *Conquest of Mexico*; Chimalpahin's *Annals*, Siméon's edition; for the names of the months, see *Metztli*; for the days, see *Ihuitl* in Siméon's *Nauatl-French Dictionary*.

² On Mt. *Uich-ach-tecatl*; "keeper of the light?" *Uich*=ἡώς, *eōs*-t-ra, Easter.

³ The vigesimal system is still in use in *Kāfiristan* in the Hindu Kush region.

also meant "a great many." From this it may be seen that the primitive counting was rather indefinite just as we yet say, "eight or ten" men.

The first great unit in Mexican notation is 20; the next 400, its square; the next 8,000, its cube. Twenty is called *cempoalli*, one score; 400, *centzontli*, meaning many, literally, "a head of hair;" 8,000 is called *xiquipilli*, a purse or bagful.

In counting, they add units to 10 as we do, but fifteen is a new base. Ten is *matlactli*; eleven, *matlactli ce*, "ten one"; sixteen is *caxtolli ce*, fifteen one; nineteen, *caxtolli on nauí*, "fifteen on four." Once is *ceppa*; another time, *occeppa*. The system is capable of expressing complicated ideas which in English can only be explained at length. It is thoroughly worked out, is comprehensive, and an index of a high degree of civilization, such as the Aztecs possessed. The vigesimal system is also used by the Mayas of Yucatan and their calendar was the same as the Aztec.

THE NUMERALS (CARDINAL)

1. Ce
2. Ome
3. Ei, yei or e
4. Nauí (nahui)
5. Macuilli (a hand)
6. Chica ce
7. Chicome
8. Chicuei
9. Chiucnauí or chicanauí
10. Matlactli ("both hands")
11. Matlactli oce (on ce)
15. Caxtolli
16. Caxtolli oce (on ce)
18. Coxtolli omey (on ei)
20. Cempoalli ("1 score")
21. Cempoalli on ce, or oce

- 22. Cempoalli omome (on ome), etc.
- 30. Cempoalli on matlactli
- 34. Cempoalli on matlactli on nauí
- 35. Cempoalli on caxtolli (20+15)
- 40. Ompoalli (ome poalli)
- 100. Macuilpoalli ("5 score")
- 250. Matlapoalli ipan ompalli on matlactli¹
- 400. Centzontli (a great bunch; a head of hair)
- 500. Centzontli ipan macuilpoalli (400 with "5 score")
- 1000. Ontzontli ipan macuilpoalli (2 tzontli with "ten score")
- 7000. Caxoltzontli ihuan ontzontli ihuan matlapoalli
- 8000. Cenxiquipilli (one "purse" bag; Cen=ce)

Macuilli, five means simply a "hand" or "hand-grasp."

Chica, in *chica ce*, six, etc., is Sanskrit *adhika*, plus.

Matlactli, ten, is the torso or both hands (half the body).

Nauí, four, may mean a man, "hands and feet," but any positive opinion here involves the differentiation of Mexican *chica nauí*, nine, and Sanskrit *nava*, nine, which may or may not be related. (See "hand counting.")

Ten.—The fact that Mexican differs from other Aryan languages in its word for ten may throw some light on our *deka*, English *ten*. In Mexican, *mo-teca* simply means "they assemble," hence *deka* may originally have meant merely a "gathering," like our expression "ten or twelve" [persons].

Caxtolli, fifteen, I should derive from Sanskrit, *kas*, to move, or *çac*, renewing, plus *tula*, balance, weight; Greek, *τάλαντον*.

Xiquipilli means a purse or haversack. This might indicate perhaps that the people who originated the word were once accustomed to having large sums of money though

¹ There is some latitude in the use of *ipan* and *on*. In general, *ipan* is used above one hundred; also in the use of *ihuan*. Chimalpahin says *macuilpoal xiuitl ipan ce xiuitl*, 101 years, also *matlactli ihuan ome xiuitl*, 12 years.

the Mexicans used it in reckoning bags of cacao beans. Compare a *lac* of rupees as used in modern India.

Plurals.—The numerals have plural forms as: ome, omentin; ei, eintin, etc.

ORDINAL NUMBERS

Chapter I, ic ce quaitl.

Chapter, XVI, ic caxtolonce quaitl.

Chapter XXI, ic cempoalli ihuan ce quaitl.

One time, ceppa.

Two times, oppa.

Three times, expa.

Four times, nauhpa.¹

Five times, macuilpa.

Six times, chicaceppa.

Seven times, chicoppa.

Eight times, chicuexpa.

Nine times, chicunauhpa.¹

Ten times, matlacpa.

Ordinals may be read with *can*, as *excan*, "by threes," three in a bunch; also with *oc*, *occe*, another; *ocome*, two others.

The first time, ic ceppa.

The second time, ic ompa, etc.

Ce.—*Ce* and *centzontli* deserve a passing notice. *Ce*, Sanskrit *sa*, Latin *as*, denotes the idea of unity. The original meaning, however, appears to have been either one thing or a number of things taken as a unit. The latter sense may serve to explain the difference between the 100-unit of the other Aryans and the 400-unit of the Mexican system. The Latin *cent*-um is one hundred, but the Mexican *tzont*-li is four hundred. From this it appears that *ce* originally referred to the aggregate as a unit and not to the number of individual units forming it, considered as to their number. But it is not certain that *tzontli* can be referred to *cent*-um (see p. 48).

¹ The *h* in words spelled like nauhpa indicates merely a hiatus as "na-oo-pa," „not now-pa."

Ome, two, may, I think, fairly be considered as the sacred syllable *om*. In Panjābi, *ikokar*, *ik-om-kar*, means naming the trinity, i. e., doing "the one *two* three" but three is omitted.

Nine is *chiuchnau* or *chica nau*, *chica* "plus," Sanskrit, *adhika*, indicating increments added between 5 and 10.

It will be observed that I have identified as Aryan, 1, 2, 6 to 9, 15, 20, with 100 doubtful. I have not been able to ascertain the relationship existing between Mexican 4, *nau*,¹ and Sanskrit, 9, *nāva*.

POSSIBILITIES OF MEXICAN NUMERATION

The word *matlactli*, ten, affords a good example of the capacity of the Mexican for varied expression. *Tlamantli* or *Centlamantli* is in general, thing, object.²

Matlactlamantli, 10 objects.

Im matlactlamantli, centlamantli, 10 objects in one, "a ten."

Im matlactlamanixtin (plural of above), all the ten objects, all the tens.

Matlacpa, ten times.

Oc matlacpa, ten more times.

Matlacpa matlactli, 10 times 10.

Matlacpa ixquich, 10 times as much.

Matlacpa omome or omoppa, 12 times.

Im matlactli ce, 10 in one.

Matlaccan, in 10 places.³

Ic matlactlamantli, 10th object.

Inic matlactlamantli, the 10th object, or a tenth part.

Matlatlactli (reduplication), by tens.

¹ *Four* was a sacred syllable in magic, to which the Aztecs were greatly addicted. For the sacred syllable "om," see Elphinstone, *History of India*, Vol. I, Bk. I, chap. ix.

² Sanskrit, *mantra*, any utterance of a priest, during devotion, which he enumerated as a part of his supposed inspiration, or incantation.

³ Siméon renders *matlaccan*, "dix parties," ten parts, also "dix endroits," ten places. *Can* is a locative of place, ordinarily, as *qualcan*, a good place.

Hand counting.—An excellent account of the origin of numeration and "hand counting" is given by E. B. Tylor in *Primitive Culture*. I shall give a few of his salient facts here condensed and in my own phrasing. The Tonga Islanders have native numerals up to 100,000 (Vol I, p. 241). Finger methods vary. In Tamanac, of South America (quoting Father Gilig), 5="whole hand;" 6="one on the other hand;" 10="both hands;" 11=stretch out both hands and say: "one on the foot;" 16="one on the other foot;" 20="tevin itòto," "one indian;" 21="one to the hands of the other indian;" 40="two indians."

Per contra in Juri "a man" is only 5.

"Zulu is perhaps surpassed by no language in finger counting." They begin in general with the little finger of the left hand, then the thumb makes a "finish hand;" the right thumb becomes six; the right index finger is seven and the word used is *komba*, to point.

Tylor (quoting Dr. Wilson) continues: "The *dual number* preserves to us that stage of thought when all beyond *two* was an indefinite number."

The natives of the Island of Futuna, New Hebrides, have numerals to 4 inclusive; 5 is "my hand;" 6, "my hand and one;" 10, "both hands;" then on toes up to 20; above 20, "very many." This is the simplest system.¹

Does enumeration throw any light upon the relative antiquity of Indian tribes?

One of the first things which primitive man learned must have been to count in some fashion, however crude. The Tupi Indians of South America have distinct names for the numerals, only from *one* to *four* inclusive. When we compare this meager result with the highly developed system of the Nauatlaca the contrast is very striking. The

¹ W. G. Fitz-Gerald, *Harper's Magazine*, October, 1907.

Mosquito Indians have an elaborated system wholly different from the Aztec. The Algonquin system apparently has no relation to any of these, unless it be that the Delaware, newo, newa, *four*, be the Mexican nauí, four. The system appears to be concise and sufficient. The Tupis appear to have been wholly ignorant of hand counting, which the other peoples mentioned all have. Why this great difference in the numeral systems of inhabitants of the same continent? What is the signification? It seems to argue that these tribes have been isolated for very long periods and separated before the very beginnings of anything like culture.

Some, however, believe that the origin of counting is to be found in purely mental concepts which involve ideas of *Cosmogony*. For example, if the ego be considered as a center there at once arises the idea of the *four quarters* of the earth with reference to this center, also the idea of an upper world (zenith) and an under world (nadir).¹

¹ See W. J. McGee, "Primitive Numbers," *Smithsonian Report*, 1897-98, Part I, p. 834. This is, of course, pure philosophizing, hence neither susceptible of proof nor to be contradicted.

CHAPTER XIII

History and Geography of the Mexican Language—Tribes—
Native Records and Historians—Ruins—Population.

[*Introductory Note.*—Chaps. xiii, xiv, and xv were written before I had determined positively that the Nauatlaca¹ are Indo-Iranians. I tried to give a fair résumé of their fragmentary, mingled history and tradition and naturally I ventured on some speculation of my own. I have concluded to let this part stand as originally written because it is a fair statement in brief compass of the difficulties of the case and it presents a few opinions of various writers with my own tentative suggestions. With one year's further successful investigation, I have proceeded to give, in chap. xvi, what I finally believe to be a clear and conclusive exposition of the Aztlán legend and have identified some of the places named in it.]

Tribes.—There was a mingling of tribes on the plateau of central Mexico, and much speculation has been indulged as to their origin and relationship. There were Toltecs, Chichimecs, Chalcas, Tlacochochcalcas, Mexicans, Acolhuas, and others. It is to be remembered that the best-known name of all, *Azteca* or *Mexica*, was unimportant in the early days. But finally the Mexica obtained the mastery over the other tribes and subdued numerous "kings." But these kings, like those overthrown by Joshua, were really petty rulers, "lords rich in a dozen paltry villages." From the time of Axayacatl to the conquest, the rulers of Mexico were really worthy the name king, though they styled themselves simply "tlatoani," "he who commands," literally, who speaks. Their courts were splendid and refined, with incomprehensible aspects of barbarism. The

¹ Nauatlaca is a compound of *Nauatl*, a language, and *tlacatl*, man, the whole meaning the people who speak *Nauatl*.

great Axayacatl himself once deigned to take part in a dance, clad in a gorgeous flowing robe of feather work which was open at the sides sufficiently to give glimpses of his fine figure and coppery skin. Some incidents of this great festal occasion, half ball, half religious ceremonial, strikingly illustrate the absolute power of this monarch who was satisfied to style himself "he who commands." The chiefs of the Tlacochealca had come, bringing with them the great musician who was expected to conduct the ceremonies. But somehow he bungled things, when a young musician who was present volunteered and saved the day. He won such applause that the great Axayacatl himself deigned to emerge from the seclusion of his women, in the royal gallery, and indulge in a *pas seul* to the edification of his people. Because of their failure, the leading men of the Tlacochealca expected nothing less than the fall of a few heads to placate displeased royalty. But the king was in a merry mood, and heaping gifts on his new favorite, overlooked the failure of the old. This incident suggests the arbitrary acts of oriental despots and especially those of the kings of Persia.¹

To illustrate the smallness of these "kingdoms," Tezcoco which was the Athens of Nauatlaca culture, is only about thirty miles from Mexico. But all these tribes (some say seven) spoke the same language, Nauatl or Mexican. This fact makes their tribal names seem still more obscure. From what central seat did these successive migrations emanate? And what became of the parent stock? Its extinction implies a great antiquity and perhaps a great national calamity. But the Toltecs appeared on the plains of Anahuac only about 1,200 years ago according to (alleged) authentic data. These Nauatlaca, Nauatl men,

¹ *Annals of Chimalpahin*, year 1479.

regardless of tribal relation have been called "Nahua," "Nuhua," or "Noa." They have once been in close touch with the Hindus, the Assyrians, and the Accadians.

Ruins.—The great pyramid, teocalli, of Cholula incontestably suggests Babylonia.¹ I visited Cholula in the year 1891 and was filled with wonder at its vast dimensions which clearly establish the existence of a dense population and such a work implies an organized community long settled in one place. Twenty-seven miles northeast of the City of Mexico, at *Teotihuacan*, the sacred city of the Toltecs, are the pyramids of the sun and the moon. The pyramid of the sun is over 200 feet in height. These pyramids are like the pyramid of Cheops in form, while Cholula is terraced. A descending tunnel leads to the interior. Here, according to Sahagun, tradition says that Tecuiztecatl, god of the sun, and Nanauatzin, god of the moon, once tarried four days. According to Dr. Karl Sapper, houses at Tonina, state of Chiapas, are built with walls sloping inward exactly like the great pylons of Egypt and the pigeon houses of that country today. There is an H-shaped court at El Sacramento and the substructure of the great inclosure at Baalbec is H-shaped. The ground-plans of a house at Ticul greatly resemble the plans of the temple of Denderah. The exterior of Denderah, as well as the interior, is covered with sculptures as are the exteriors of Peten, Palenque, and Uxmal. To my mind, these facts, taken together, point significantly to some former intimate connection between the people of the Old World and the New, the indications being that this connection, so far as the Nauatlaca were concerned, existed after civilization had made a considerable advancement.

¹The pyramid covers more than 44 acres. It is larger than the pyramid of Cheops. Humboldt also remarks the resemblance of Cholula to the temple of Bel or Belus. *Researches*, Vol. I, p. 98.

I quote the following from Dr. Cyrus Thomas. Referring to the slight progress made in deciphering these records, he says:

We might hope that further research will prove that this has some relation to Maya history, were it not that the beginning was placed about 4,000 years prior to the time when the inscriptions were made, a date so remote as to preclude the supposition that it related to any noted event in the history of the tribes.¹

Chimalpahin begins his *Annals*, *seventh* relation, with the dispersion of men at the tower of Babel. But his *second* relation begins with the year 50 A. D. Perhaps after all he did not get his authority for his pre-American history, entirely from Christian sources. (See notes p. 126.) There is a tradition that an Aztec king, long ago, ordered all the records of his people to be burned. Chimalpahin and Ixtlilxochitl were both Indian historians who wrote in the Nauatl language. Both could read the old picture writings and both refer to records now lost, which they understood perfectly, in such a manner as to leave no doubt of the truth and accuracy of their statements regarding these documents.

While the Maya language appears to be distinct, according to philologists, from the Mexican, and the Maya culture apparently older than that of the Nauatlaca, all indications point to a common origin for both, Asia. It may not be going too far to assert the same of the civilization of Peru. It is almost certain that the deciphering of the Mexican and Mayan hieroglyphics would add little to *authentic* history but out of much priestly rubbish and records of world-old myths there could unquestionably be gleaned *facts* which would throw a flood of light upon ethnology, archaeology and mythology.

¹ *Smithsonian Document*, No. 1532, "Central American Hieroglyphic Writing."

The geographical extension of the Nauatlaca and the Mexican language was very considerable, though not equaling that of Algonquin, Tupi, or Quichua. The language extended from the state of Sinaloa in northwest Mexico on the Pacific, obliquely across the continent, to the Mayas of Yucatan on the Gulf of Mexico, a distance of nearly 1,500 miles. It reached down the Pacific coast farther south into Nicaragua, 2,000 miles, where it is now extinct. It ruled supreme on the table-lands of Anahuac, except that an enclave of Otomi ran down from the north nearly to the City of Mexico. Mexican was the Latin or *lingua franca* of nearly all Mexico. Tribes who did not speak Mexican always understood more or less of it. Its only real rivals in southern North America were the Maya and the Quiché of Yucatan.¹

Population.—At the time of the conquest, 1520, the language was spoken by several millions of people, probably five millions at least. Tenochtitlan or Mexico was a great capital, a modern Venice, possibly equaling in size the present Venice of the Adriatic. Cholula had 200,000 inhabitants. Humboldt thought the numbers of the Indians to be exaggerated by the Spanish conquistadors. Tylor, on the other hand, says the temperate region shows evidences of a former population perhaps ten times that of the present.² Cortez wrote to the emperor Charles V that from the top of one tower at Cholula he had counted more than 400 other similar towers.³ Some temples had *two* towers, others only *one*. Some of the Spanish con-

¹ Mexican is still spoken extensively in the states of Vera Cruz, Puebla, Tlaxcala, Mexico, Guerrero, Michoacan, Jalisco, Sinaloa, Oaxaca, Tabasco, Tehuantepec, San Luis, Colima, Zacatecas, Durango. Francisco Pimentel, *Lenguas Indigenas de Mexico*, Vol. I, p. 158. [About 1,750,000 people spoke Mexican in 1862.]

² E. B. Tylor, *Anahuac*.

³ Clavijero, *History of Mexico*, Vol. II, p. 23, note.

quistadors estimated the population of the City of Mexico at 60,000; others say 60,000 *houses*. My own opinion, based partially on personal observation of the stupendous ruins of the country, inclines to the latter estimate, since the pyramid of Cholula, as just stated, covers 44 acres. Is it not more reasonable then to accept the estimate of 200,000 inhabitants rather than the absurdly low estimate of 30,000?

Tezcoco was an elegant capital where the Nauatl language was spoken in its pristine purity. There the poet king Nezahualcoyotl¹ held his court and wrote his poems. He also constructed a great aqueduct to furnish his capital with pure water. This is no exaggerated picture; the testimony of the conquistadors may be adduced in confirmation. These men, many of whom had been soldiers of fortune and had visited most of the capitals of Europe, were struck with astonishment at what they saw on entering the City of Mexico. Some of these adventurers declared that in all Europe, Constantinople not excepted, they had never seen a finer appointed and busier market-place than that of Tenochtitlan, the doomed capital of the ill-fated Empire of the Aztecs.

¹ Nezahualcoyotl, "fasting coyote," or "hungry wolf," (*canis latrans*).

CHAPTER XIV

ORIGIN OF THE NAUATLACA.—Evidence from Language—Uitzilopochtli—Possible Assyrian Affinities—The Deluge—Pre-Columbian Discoveries.

The various tribes which invaded Anahuac from time to time, in successive migrations, all appeared to be of one stock and all spoke Nauatl, though the word Nauatlaca was never used by these people in speaking of themselves, in so far as I can discover. Their story is interesting even if nothing is definitely fixed as to localities. But first let us continue with the evidence of language a little longer because that is more certain.¹

Uitzilopochtli.—Teçocomoc, says Uitzilton, "Little Humming Bird," was born 1091 A. D. He was apotheosized as Uitzilopochtli. It is asserted that he led the Aztec "migration," 1064?–1087, twenty-three years, from the departure from Aztlan to the landing at Tlalixco. But apparently he was not born till after the "migration" had ended. Clavijero says, in spite of Chimalpahin's assertion that the chief's name was *Uitzilton*, that Boturini made a mistake in the word because he did not understand Mexican.² But Chimalpahin wrote several books in Mexican. Furthermore, Clavijero gives a succinct account of the miraculous conception and terrible events attending the birth of Uitzilopochtli at Coatepec near Tula. Sahagun

¹ According to A. von Humboldt, Professor Vater and Dr. Barton, of Philadelphia, recognized in eighty-three American languages, only one hundred and thirty-seven roots common to both hemispheres or one and two-thirds words to a language. Such results are practically *nil*. I conclude that the examination must have been one of those which may be classed as "unscientific." A. von Humboldt, *Researches concerning the Institutions and Monuments of the Ancient Inhabitants of America*, Vol. II.

² Clavijero, *History of Mexico*, Vol. II.

spells the name Vicilupochtli and remarks: "fué otro Hercules," he was another Hercules.

Let us analyze Uitzilopochtli. *Uitzilin*, is derived from Sanskrit, *vi*, bird + *svar*, to hum, English, swarm (as bees).¹ What then does *opochtli* mean? This question at once involves mythology but it pertains to etymology as well. The Indian definition of *opochtli* is left hand (side). Why was his *left* foot adorned with humming-bird feathers rather than the right foot, or both feet? The Greeks considered the left hand unlucky, hence always referred to it as the "well omened," *εὐώνυμος*, by way of euphemism, and to break the spell of bad luck. Even today we all have heard that it is bad luck to see the new moon, for the first time, over the left shoulder.² Though moon worship was general the Aryans assigned the planet a specific bearing on the question of good or bad luck. This would appear then to be a very widespread Old Aryan superstition, if found in Europe, Asia, and America. The Romans alone of Aryan peoples did not hold the left hand to be unlucky. Hence is it not reasonable to suppose that the Mexicans decorated the *left* leg of their god for the same reason which prevailed among the Greeks, that is, because the left side was unlucky? The word *opochtli* in itself does not mean left at all, but on the contrary something *good*, the meaning *left* being apparently an extension. The Sanskrit root *bhāj*, means to divide, deal out, and to give a part or get a part; *bhaga*, a derivative noun, means he who deals out, master, lord, also an epithet of Savitar, an exalted god of the Hindu pantheon. In Old Persian *Baga* was God; in Russian

¹ *Mexican in Aryan Phonology*, p. 9.

² This "left hand" superstition is not to be confused with the obscene "left-hand" rites to the goddess Kali described by Jastrow, *Religions of India*, p. 491. "Right and left" had originally nothing to do with the *cardinal points*.

Bog. Hence we see that the Mexican *o-poch-tli* does not stand alone in representing an Aryan deity. *Bhag-avant* was fortunate, blessed, *bhagin*, happy; *bhaginī*, a sister, "the happy one." This last use also occurs in the Mexican, *ich-poch-tli* being a girl, *tel-poch-tli*, a boy. The initial *o* is merely prosthetic. Does it not follow clearly that *Uitzilopochtli* as a deity is surely Aryan and cognate with the modern Russian name for God, *Bog*, and the ancient Iranian *Baga*?

But it may be asked why was so tiny a creature as the humming-bird selected as the attendant of so terrible a god? The answer is hidden in the impenetrable mists of mythology. Suffice it to say that it was a universal Aryan custom to assign various animals as attendants (simulacra?) or even as guides to gods and demi-gods. Witness the owl of Pallas, the garuda of Vishnu, the mouse of Apollo and the woodpecker and wolf of the Italians. The unknown god who appeared to the Inca (Falb, *Land of the Inca*) was accompanied by a black dog.

The Algonquin *Manabozho* is doubtless *opochtli*. *Manabozho* was a sort of protean deity who assumed various forms, sometimes grotesque. Ordinarily he was called the Great Hare. His father was the west wind, his mother granddaughter of the moon (see "Climate," p. 135). In Natick, *Nanepaushadt* is moon or moon-god. In Scotland the *west wind* is associated with the moon-myth. *Manabozho* recreated the world after the deluge.¹

Besides the name *bozho* an additional link connects

¹See Parkman, *Introduction to Jesuits in North America*. In spite of his absurd attributes he was considered chief of all the Manitous, a position according well with *Savitri-Baga-Uitzilopochtli*. He also granted the Indians immortality, but a curious squaw opened the packet and the gift escaped. Here is a legend evidently parallel to the myth of Pandora's box; *Bureau of Ethnology Report for 1890-93*, Menominee Vocabulary: *Manābūsha*=*mūshā*, great+*wabūs*, rabbit, *sic*?

this god with the Hindu pantheon. He was called the Great Hare and was a descendant of the moon. The Hindus see a hare or a gazelle in the moon instead of a man, but the Tartars also revered the moon.¹

Even the Spaniards appeared affected by the humming-bird myth since it is related (Chimalpahin, *Annals*, year 1531) that a humming-bird attended Friar Martin de Valencia in his solitary meditations and prayers.

The name for woman in Mexican is *cihuatl*. In Tupi it is simply *ci*, mother. The Sanskrit *çiva* is the phonetic equivalent of these words. It means kind, gracious, lovely. The horrible god *Çiva* (*Siva*) "the gracious one," is one of the Hindu trinity to this day, and his name is also a euphemism. A few words more as to *Tetzauitl* which was an appellation of *Uitzilopochtli*.² A celestial phenomenon, *tetzauitl*, "terrible thing," in the year 1509, excited terror among the Mexicans. It was a great light in the heavens which appeared nightly for months. From Chimalpahin's description it is hard to believe it a comet. *Tetzauitl* as an appellation of *Uitzilopochtli* plainly marks him as a devil-god. I derive it from Sanskrit, *dasá*, evil demon + *vid*, to know, a seer; Icelandic, *vit-ki*; English, witch; Anglo-Saxon, *wicca*. *Tetzauitl* stands for the evil side of *Uitzilopochtli*. Will any one claim that these references, analogies and derivations, are unscientific or mere coincidences? But there is more.

¹ Carpini, *Dawn of Modern Geography*, Vol. III, p. 284. The same may be said of the Hottentots and other tribes, *Cyclopedia of Superstitions*.

² See "Nauauatzin," *Mexican in Aryan Phonology*, p. 13, and "deities," p. 161, *infra*.

Much futile and some absurd speculation has been indulged in by writers on the subject Mexican mythology. *Uitzilopochtli* has been considered as a personification of the powers of nature and the word *uitzil* even applied to the whisperings of an oracle. The Michoacan legend says *Tezpi* (Noah) sent out *uitzilin* to explore the waters. An extended account of *Uitzilopochtli* may be found in Kingsborough's *Mexican Antiquities*, Vol. VII, Book III, pp. 103 ff.; also *Native Races of the Pacific Coast*.

The Assyrian Bel, Hebrew Baal, was one of the most puissant gods of western Asia. He was supreme at Babylon, Baalbec, Carthage and elsewhere. Without going into the origin of his name, it is possibly connected with the Sanskrit verb *pālaya*, to protect, because *bel* also meant a secular lord, a feudal protector. The Mexicans also have the phrase, *ipal nemoani*, *Nebo-Ana? *nembo-ana? for God, that is, "He who walks with the living" or "Him through whom men live." *Ipal*, "his pal," in this case evidently means protector. But I should add that the connection between Mexican and Assyrian in this case is only in the phase of suggestion.

Altepetl means town, in Mexican. *Al* is separable, *tepetl* means hill or mountain, as in "popocatepetl," "the mountain smokes." In the Assyrian cuneiform writings *alu* was always placed as a catch word before sentences describing or referring to cities.

In Mexican, *calli* is house, or a public building; *chantli*, is a dwelling; *ekalli* in Assyrian is palace (*c = k*). *Kal'a* was a Sassanian palace. *Nacatl* is *meat* in Mexican; in Egypt (where camel's flesh is eaten) it means she-camel.

The Deluge.—Noah (Noakh) in Hebrew is defined *rest*. In the opinion of some critics it really is the name of a people instead of a man. Oppert believes *Noah* to be *anu*, a god; and *Abel* to be *abilu*, son. The Semites called the Accadians *adamatu*, "red race," and it seems to be agreed upon that Adam was a *red man*. The *Nahua*, or *Noa*, were one of the tribes of the Nauatlaca. *Noakhali* is a district of Bengal.¹

¹ These references to Semitic culture were written at the time when I believed the Mexicans to be closely associated with the Semites. They are allowed to stand here for what they may be worth, if anything. They are not wholly valueless because it is certain that the ancient Aryans were at various times in contact

The Mexicans, like all nations, had a tradition of the deluge. *Coxcox* was their Noah and eight people were saved in an ark called *tlaptli petlacalli*. In an Aztec painting he is represented as floating on a log on the waste of waters. This phrase is not easily explained. It is easy to get the modern Indian significations, but what were the original meanings? It must be remembered that Mexican is a non-literary language and for lack of continuous history of words, only comparative philology will help us out. *Tlaptli* means a coffer, and *petlacalli*, literally, "a mat-house," that is, not made of mats but made like a mat, probably of wicker or woven fabric. It would seem, at first glance, as rather a childish conception, that of an ark made of mats or wicker work. But on the authority of Dr. Peters, who conducted the explorations in Babylonia, for the University of Pennsylvania, boats are made there today precisely in that fashion. A framework of wattles, interwoven, is thickly covered with pitch, and such a boat will support a team of horses. If the Mexicans ever used *petra* for stone, of which I have no evidence, then *petlacalli* would mean stone or pitch (?) house.

Tlaptli, a coffer, may possibly be derived from the Sanskrit root *trp*, to sustain, nourish. This meaning, the ark would satisfy. *Petlatl* (in *petlacalli*) may also be explained figuratively. In Mexican court language, "*icpalli ihuan petlatl*," "seat and mat" were symbols of authority. Hence the whole phrase "*tlaptli petlacalli*" might mean something like this: "the ruler's or patriarch's house which sustained us." Nothing in the phrase even hints at boat. The Mexican name for boat is *acalli*, "water-house." It is further to be remarked that the ark of the with Semites and Turanians. Even today an Afghan tribe claims Hebrew descent. A very different derivation is given for Nahua in *Mexican in Aryan Phonology*, p. 12.

covenant was really a coffer, and until lately a meal chest was called an *ark* in the north of England.¹ [A better derivation of *tlaptli* is *tr* + *ap* = "across the waters."]

Like the Babylonians, the Nauatlaca recognized the male and female principle in their deity, as is clearly shown in the following quotation from Chimalpahin's *Annals*, year 1519. "Auh in aquin oquicaco in teotl, in tonantiz, in totatiz." But he who has come [Cortez] is god, our mother, our father. The female in such cases is always mentioned first.

What then is the purport of all these references to Hindus,² Assyrians, and Hebrews? That the Nauatlaca are descended from all of them jointly? By no means, but it is evident that these red immigrants to America were once in close touch with the ancestors of all these nations. Indications point to the highlands of western Asia, the country of the Elamites, as the original seat of the Nauatlaca. *Elam* is given as Hebrew for Aryan. A grammatical expression, "in Susinak," identical with

¹ Pushita is the Indian name of a township in Auglaize County, Ohio. Compare it with Pushan a Vedic deity or with Uitzil-o-poch-tli. Illinois is the French rendering of Illini, an Indian appellation in the Delaware, *inini*, men. It violates no law of phonetics or historical probability to derive illini (*inini*) from *ilu*, Assyrian, a god (plural, *ilani*). And here we are brought face to face with the fact that all the ancient peoples believed that they were a "chosen people," or in some measure under divine protection, and many tribes claimed divine ancestry. This reduces the Hebrew claim "Chosen People," to an insignificant historical incident. But a derivation of Illini directly from *Iran* is better. Compare *Eirin*, Erin, Ireland.

The swastika, , a mysterious symbol, belts the earth by way of Java, Egypt, Spain, and Arizona. It is generally supposed to be a religious symbol, but Falb (*Land of the Inca*) thinks it represents the ancient hand mills. The name is Sanskrit, meaning "well-being," or simply "good luck." The swastika has lately been found at Moundville, Ala., U. S. A. Mr. Wardle (*Harper's Magazine*, January, 1906) who conducted the explorations, calls it merely a sign of the cardinal points. The vase in question carries the form .

² The marriage customs of the Aztecs greatly resembled those of the Hindus, Prescott, *Conquest of Mexico*, Appendix. For superstitions see Elphinstone, *History of India*, Vol. I, Bk. I, chap. iv, p. 76.

modern Mexican syntax, occurs in an inscription of the Elamites, 1200 B. C., according to a translation by Jacques de Morgan. The country of the Mekhirani was overrun and devastated by Ezar Hadon 681 B. C.

The Mexican termination, "catl" (Sanskrit, çatru or çatru?) as in Aztecatl, may sometimes possibly mean "lord of" and may be *Katur*, of which *Chedor* is the Hebrew equivalent according to Sayce,¹ and Chedor-Lao-mer (Lagomer) was one of the kings mentioned in Genesis (14:9).² *Katur-Mabug* resembles the name of the Mexican official *tla-maocatl* = *Mabug-a-tl*. Everything discoverable in the Mexican language then points to the fact that it must be of extreme antiquity.

Pre-Columbian discoveries.—I may as well refer to "pre-Columbian Discoveries" of America, though the subject seldom touches upon philology, and has only a remote bearing here. Only one of these discoveries, in so far as I am aware, has any philological bearing on the *origin* of any tribe of Indians, and that is told in the story of Madoc or Madog, a Welsh prince who is said to have sailed westward from his native country early in the eleventh century and never returned. From this fact, if it be a fact, has sprung some Welsh myths connected with the Indians of North America. In "Lives of Famous Indian Chiefs" (quoted from Baldwin, *Ancient America*) may be found a remarkable affidavit by the Reverend Morgan Jones who "certifies" that he was wrecked in the year 1660 at Port Royal [S. C.] where he held conversation with the Tuscarora Indians in British (Welsh), and "did preach to them

¹ A. H. Sayce, *Higher Criticism and the Monuments*, p. 164.

² I have not been able to determine "catl" as a separable affix nor to connect Mekhirani with the puzzling word Mexica. The same applies to "otl" as an abstract termination. The word *Kutor*, *Katir*, is still in use in Kafirstan with a doubtful meaning, probably a horseman or lord.

three times a week." George Catlin also tells a somewhat similar story of the language of the Mandans,¹ and although he asserts that the Mandans are *extinct*, contrary to the fact, he tells the story of their tragic end with such circumstantial detail that I think there must be some confusion of names as to the tribe in question.

¹ Norman Wood, *Lives of Famous Indian Chiefs*, Aurora, Ill. Catlin, *Indians of North America*, p. 759. Catlin's list of words will not bear scientific scrutiny. The affidavit of Rev. Morgan Jones I leave to the individual opinions of my readers. This matter is discussed fully by Bancroft, *Native Races of the Pacific Coast*.

CHAPTER XV

ORIGIN OF THE NAUATLACA.—Historical Evidences—The Migration—"Chichi"—"Tlacochealca"—Meaning of Aztec—The Aztlan Myth.

Tribes.—It now remains to set down the little that is known about the wanderings of the people of Anahuac. All the writers tell us that there were *three* important tribes who successively arrived at the Mexican lakes. First came the Toltecs, "architects," who were supposed to have been artisans. Some derive the name from tollin, a reed, a rush (?), some from Tollan-Aztlan. They were builders of fixed habitations. Next were the Chichimecs, who were supposed to have been a pastoral people because the name is defined "he who sucks."¹ Lastly came the Aztecs. Why were they not called the "bronze workers," from *aes*, copper, *asi*, *ensis*, a sword, and "*tecatl*," master of? In fact, Quetzalcoatl, "the fair god," is said to have taught them the art of casting metals.² He was also a law-giver and instituted the book of martyrology. All these people came from Aztlan in the north.

The Sanskrit must usually be given first place in things Mexican and *as* means (1) to be, to exist, *asura*, a god; (2) to shoot, to dart; and from this last we may get the idea copper, if lances were tipped with bronze. But if we take *as*, (1) then we may get *as-ura*, the gods, and

¹ See discussion of *Chichimecatl*, p. 39, note.

² Quetzalcoatl = quetzalli, a plume + coatl, a serpent, hence "plumed serpent." *Hoa* was the Babylonian serpent god, the serpent of the garden of Eden, no doubt (Rawlinson). *Hoa* may be the equivalent of the Mexican *coa*. *Hoa* was not originally an *evil* personification. Since *coatl* is derived from Sanskrit *cubh* it would be necessary to show a corresponding phonetic change in Assyrian, or a direct borrowing on one side or the other.

Aztlan may become "the land of the gods," Germanic *aes-ir*; Irish, *ais-sidhe*, "god land;" possibly a land specially ruled or favored by the gods as was ancient Palestine in the estimation of the Hebrews. This second view is very probable. The Nauatlaca, especially the Mexicans, were eminently religious, as is evidenced by their turning back to their own country to worship. The Mexicans had an important official called *Teohuateuctli*, a word which means "near to, or guardian of, sacred things." Doubtless he was a sort of *pontifex maximus* or high-priest.

Chichi is defined by the lexicographers, Molina and Siméon, as dog, and *mecatli* is a whip, a cord. This would give us "dog whip;" and Chichimeca, "masters of dogs," but also interpreted, no doubt falsely, simply "dogs" and suggesting a people who may once have sledged with dogs in the far north. This would also suggest that the Chichimecs came to America overland by way of Alaska.¹ In the face of this, is the definition, "one who sucks," but Sanskrit *dhī*, means also pious, and *dhṛ*, chi, means bear (stout), *θρό-vos*, hence I do not advance the dog-sledge view as a hypothesis, but merely as a suggestion, and to illustrate the difficulties which surround this subject. But these few lines of speculation are perhaps more than sufficient. The Chichimecs were supposed to have left Aztlan, in the north somewhere, about the year 50 A. D.²

The northern tribes around Puget Sound, the Shoshónes, and farther south the Utes and the Moquis have

¹ Chichi means breasts, hence milk, in Japanese, also father; it is derived from Sanskrit, *dhī*, to suck, but *dhī* also means devotion. Hence this word applied to the Chichimeca, "dogs," in derision was accepted by them as a term of honor. See p. 39, note.

² An important date is 1091 A. D., when they "reformed" the calendar. But according to Veytia an earlier "reform" took place at a meeting of Toltec astronomers, 134 B. C., in Ueuettlapallan (Balkh?).

been classed as the Uto-Aztecan stock. In 47 Shóshone words I found 21 apparently akin to Nauatl.

The Toltecs, says Clavijero (Vol. I, p. 112), began their migration 596 A. D. and traveled, always southward, for one hundred and four years. Their arrival at Tula (Mexico) was about 690? A. D. According to this account Aztlan could have been a country situated at an immense distance. It is supposed that all these tribes came from Aztlan. But Tecoçomoc says the Aztecs required only twenty-three years for the migration.

Chimalpahin Quauhtlehuanitzin, a descendant of Indian kings, was born 1579. He was near enough to the conquest, beyond doubt, to have access to Aztec documents now lost which he could decipher. The traditions of the Aztec empire still lived in his time. He is a careful, trustworthy writer, and his *Annals* have been called *the* Mexican classic. I shall follow him a little farther.

In places, Chimalpahin is vague, owing as he frankly confesses, to the fact that he did not know what the exact facts were. His pages teem with names of tribes and places, long bizarre names which, to anyone who does not understand Mexican, seem hopelessly barbaric. It would be useless to try to follow him far in one short chapter, but the leading facts may readily be culled from among the minor details. I will quote the opening sentence of Chimalpahin's "Sixth Relation." To understand the date, an understanding of the Mexican calendar is necessary.¹

XIII Tochtli Xiuitl, 1258 Años—Inic ualquizque in Xicco in Chichimeca in intlan Chalca in oncan catea XVIII xiuitl, in atenco cenca quipopouhtinenca, inic Chichimeca in tlein quichi-uaya quimilhuiya Atempaneca.

¹ For calendar see Prescott, *Conquest of Mexico*, Vol. I, chap. i; Introduction to Chimalpahin's *Annals*, ed. Siméon; and Veytia, *Calendarios Mexicanos*, Pub. Museo Nacional de Mexico, 1907.

Translation.

XIII year rabbit, 1258 A. D.—Then the Chichimecs repaired to Xicco where had dwelt the Chalcas for eighteen years, occupying themselves with the art of divination (?) by the water side, for which reason the Chichimecs called them Atempaneca.

The year 1258 A. D. is then Chimalpahin's first definite date in his very brief "Sixth Relation," as edited by Rémi Siméon, though in his introduction to the "Seventh Relation" he begins with the confusion of tongues at the tower of Babel and dwells on the wickedness of Nimrod. This is merely a restatement of the biblical account; but recent discoveries make it probable that the Indians did possess reasonably definite knowledge of events which occurred thousands of years ago.¹ Cyrus Thomas, as stated in chap. xv, discussing the Maya inscriptions of Yucatan, alludes to dates about 4,000 years anterior to the date of the inscriptions, which he thinks may have been written not long before the Christian era, thus reaching back over 6,000 years. Mr. Thomas discredits these dates as wholly improbable, but at least they justify further investigation before they are summarily dismissed. Mexican writers allude to old records which appear to have been chronicles from their name, as, for example, the *tecomoxtli*, sacred book, of the Chichimecs.

The Tlacochealca.—A tribe repeatedly mentioned by the Indian chronicler is the *Tlacochealca*. It may be only a coincidence, but the syllable "*coch*" of this word is phonetically equivalent to "*cush*" in *Cushites*. The *Cushites*

¹I see no way whatever of verifying these positive dates at present.

"The aborigines of America have preserved a clearer and more accurate remembrance of the great archaic events narrated in Holy Writ than the natives of the eastern hemisphere, with the only exception of the chosen people of God."—B. P. De Roo, *America before Columbus*, Vol. I, p. 211.

"There can be no doubt that the Toltecs had a clear and distinct knowledge of the universal deluge, of the confusion of tongues, and of the dispersion of the people."—Francesco Saverio Clavijero, *History of Mexico*, Vol. I, p. 116.

are lost in the obscurity of forgotten ages. They were, for one thing, an Ethiopian people, as is definitely asserted by the ancient Egyptians. But some authorities claim that they originated in Arabia. The pre-Semitic language and people of Babylonia were certainly Cushitic. What does the word mean? Evidently "The Bowmen" since *tlacochtli* is an arrow in Mexican.¹ Another name for the Tlacochealca was Nontiaques, and *Nandi* is another name for Siva "the glorious one."

This tribe apparently equaled in importance, if they did not surpass, the Mexicans themselves. He says this tribe left Aztlan or Aztlan-Chicomoztoc, that is, Aztlan of the Seven Caves, about 1272 A. D. This place or country was called Tlapallan. A long interval elapses between the building of the tower of Babel and 1272 A. D. Hence we have practically, as yet, nothing but tradition and the evidence of comparative philology to fill up the gap. The Chichimeca left Aztlan about 50 A. D., the Azteca, 1064 A. D., arriving at Tlalixco about 1087 A. D. To formulate from the *Annals* any hypothesis as to the routes traveled by the Indians or their manner of transport, would be unsafe, though Chimalpahin says the Chichimeca traveled by boat (Second Relation, year 50).² Yet most writers agree that the Toltecs preceded the Chichimecs. There evidently exists either a confusion of names or a confusion

¹ This was written comparatively early in my investigations. It is allowed to stand since it is not improbable to suppose contact between these peoples at a very early date.

The word *kuch*, a tribe, appears in India as late as the fifteenth century. The Turkish word for *bird* is *kush*; English *cushat* the ring-dove, hence the idea of *flight* may have been the potent factor in naming an arrow. *Khasti* is a bow in Assyrian. Since writing this I have found a curious confirmation of my hypothesis in "Prehistoric Moundville" by H. Newell Wardle, *Harper's Magazine*, January, 1906. A copper arrow-head was found modeled somewhat after a bird's head. Mr. Moore of the Bureau of Ethnology arrives at the same conclusion regarding the bird and the arrow. See p. 141, *infra*.

² Quoted by Siméon from MS.

of dates, else the Chichimecs *were several hundred years on the way*, which is not probable.

Chimalpahin says that when the Tlacochealcas left Tlapallan,¹ they traversed a great sea on the shells of turtles (boats of that form or name, probably) and reached a great river, the course of which they followed.² Then they returned again toward the east (?), to perform religious duties before the sun. For this reason they were called *Teotlixca*, that is, "*face to face with God*." This last name suggests another difficulty which adds to the confusion. Here was the name of a tribe changed, owing to a single fact in their history, and we have already seen (p. 126) how the *Chichimecs* changed the name of the *Chalcas*. It will be observed that these people were very pious. Again they crossed the sea and this time visited "Mermaid Land." They crossed the sea in two places, landed on a large island and explored it, and soon after arrived in Xiuhpetlapan, 1272 A. D., where they remained a year. Next they came to "*Spider Mountain*"³ and then to "*Snake Mountain*" and later to a place where the timber or scrub was so thick that they had to cut their way through it.

It will be seen that all this, while specific, is bewildering, because we cannot identify positively one single place and such a name as "Snake Mountain" affords no clue.

¹ *Tlapallan*.—The synonyms for this place are Aztlan, Chicomoztoc, Tzotzompa, Nonohualco, Quinehuayan, Teocolhuacan, Tula, Tollan, Amaquemecan, Temoanchan. I have already discussed the two first. But I fear efforts to reach convincing derivations for the others are futile [see chap. xvi]. Not all add Amaquemecan and Temoanchan. The Mexicans call the north the *right* hand; the south, the *left* hand. This is the reverse of the Hindu method. It may be considered as one proof that the Aztecs came from the *west*. In the ceremony of "binding up the years," *mo'lpilli* in *xiuitl*, which occurred at the end of each cycle of fifty-two years, the officiating priest always faced the *west*.

² Was this river the Tigris-Euphrates to the sea or the Hoang-Ho to the sea?

³ Cf. the "Earth Spiders," cave dwellers, of Japan; Batchelor, *The Ainu*. *Xiuhpetlapan*, is the "country of grass mats."

The only large islands worthy that name in the north Pacific, and which necessitate crossing a "Great Sea" to reach them, are the Hawaiian Islands. The only great rivers (on this side) are the Sacramento and the Columbia, unless we adopt the Alaskan route and the islands which constitute the extension of the Alaskan Peninsula.¹ There are strong arguments against the probability of the peopling of America from the Pacific side. In fact it is positively asserted that America was inhabited at the close of the glacial age by immigrants from western Europe who came by a northern route.²

Aztlan.—Where was Aztlan-Chicomoztoc? Possibly it was in North America and the Great Lakes were the sea, as before remarked. There has been much puzzling over the situation of Aztlan and the meaning of the word. Some think it is cognate with *aztatl*, the egret heron and place the "Seven Cavés" on the south Atlantic or Gulf coasts, or specifically in Florida. But there are no caves in Florida, and *aztatl* cannot be connected easily with Aztlan.

According to De Roo, there is, or was, a small pyramidal mound on an islet in Lake George, Florida. Humboldt describes a Mexican painting representing Aztlan, as a small island with a *teocalli* and a palm tree growing near to the temple. Florida abounds in palm trees, but apparently the insuperable objection to supposing Aztlan to be in Florida is Chicomoztoc, "the Seven Caves;" constantly mentioned in connection with Aztlan. Rémi Siméon appears to think it a fact that the Chichimecs

¹ Also see reference to O. T. Mason's sea-route, Indo-Malaysian. Keane, *Ethnology*, p. 365.

² D. G. Brinton, *American Race*, p. 28. But Petitot in *Asiatic Origin of the Esquimaux* makes equally convincing arguments for the other side of the question, such as the finding of drawings of monkeys and elephants, on Esquimaux tombs, traditions of reindeer and the assistance the Japan current would render to boats. Also the west is called by a word which means *behind*.

divided into two branches, in Florida, one going directly to Mexico led by Quetzalcoatl and Uemac and the other to Yucatan. The former was highpriest, the latter regent of the earth.

Clavijero places Aztlan east of Zacatecas, and the Seven Caves were, in his opinion, large buildings, the ruins of which still exist. But Chimalpahin distinctly states that the Tlacochealcas crossed the "Great Sea" *after* leaving Aztlan. Boturini placed Aztlan in Asia.¹ But A. von Humboldt thought Aztlan must be sought in America north of the forty-second degree of latitude. Chimalpahin's reference to timber and snow corroborates this view. Betancourt placed it 2700 miles from Mexico.

It seems absurd, however, to place Aztlan on the small barren islands off the coast of southern California as some writers have done. Those islands might have been a temporary stopping-place, but certainly they could not have been the permanent seat of any tribe worth considering. Furthermore, Chimalpahin remarks that in the year 1274, the Tlacochealca reached a place where it snowed on them, "*oncan inpan ceppayauh.*" If they left Catalina Island and traveled south, they should have reached in two years a country where it never snows except on the tops of the very highest mountain peaks. This snow fell soon after they passed through "the dark woods."

¹Clavijero did not know Boturini's reasons for this opinion. But Boturini may have been right. It is said that he was a very learned man. *As*, in *Aes-ir*, doubtless means something like "home of the gods," as before stated. Compare *As-gard*, "stronghold of the gods." But there may naturally have been a *new* Aztlan on the American continent just as there is a *New* York, a *New* Spain, etc. Brasseur de Bourbourg found reference in a Quiché MS to four Tulas, one of which was in the *east beyond the sea*. One writer (Prescott, Vol. I, p. 11, ed. note) thinks *tal*, *tol*, *tul*, originally applied to the Himalayas, the root being found in English *tall*, in Atlas, Atlantis, Italy, Aitaly, etc. Ultima Thule has also been mentioned. Here apparently nothing is certain. There are *caves* in the sea cliffs north of San Diego, at la Jolla.

It was not the Tlacochealcas alone, whose fortunes Chimalpahin follows specifically, as the following translation will show:

I tochtli xiuhtl, 50.—Nican ipan inin acaltica in ohuallaque in ueuetque Chichimeca in motenehua Teochichimeca; [also called Azteca] in uei apan ilhuicaapan ohuallaque in ohaullanelotiaque, ompa quigaco achto oncan motlallico in itocayocan Teocolhuacan Aztlan. (Second Relation.)

Translation:

1 year rabbit, 50 A. D.—Now the ancient Chichimecs, called "the godly Chichimecs," embarked on the great sea, wide as heaven; they arrived by means of oars; they landed and first established themselves in a place called (by them?) Teocolhuacan *Aztlan*.

Here we have Aztlan coupled with Teocolhuacan and distinctly not the original home. It was the place of "the Divine Brotherhood," "*ca anepantla aitic*," "in the *middle* of the water." Aztlan was described as a delightful land in which all were happy. Ducks, herons, and other water-fowl abounded. A variety of edible fishes swam in beautiful streams whose banks were cool with refreshing shade. Song birds of bright colors enlivened the woods with music. When the wanderers left this paradise, all was changed. The land became a desert, the animals were ferocious, the serpents venomous, the shrubs became thorns to tear the flesh, and even the worms were malignant. This all sounds very much like the story of the expulsion from the Garden of Eden. The Aztecs changed their name to Mexican by command of Uitzilopochtli. God gave them the bow and arrow and the fish-net and Uitzilopochtli said to them: "Ye shall for the first labor." "Yehuantin yacachto tequitizqué."¹ This again sounds like the primal curse that man shall earn his bread by

¹Dr. Seler, *Alterthums Kunde*, Vol. XI, pp. 33 ff., *illustrations* of the pilgrimage.

toil. These people evidently considered themselves a pious, perhaps a "chosen" people, though the Romans spoke of "pious Aeneas." But the chief points to be noticed are that they crossed a "great sea" in boats and reached an *island*. Where? This account *might* favor the view that they did *not* come by way of Behring Strait, or the Aleutian Islands, since there is mention here of but *one* island. He further says that they arrived *naked*, a statement which precludes the northern passage.¹ But the account here is too concise and vague. The people of the Mexican plateau were excessively superstitious and at the same time punctilious in the observance of their religion. It was a common practice for them to strip naked for the performance of certain rites, especially in the practice of their exorcisms. It is possible that the newcomers, on approaching land, laid aside their clothing and waded ashore in observance of some religious rite or in obedience to some superstition. In this way they may have literally "arrived naked." It is not probable that they made a long voyage nude, for the lowest savages make some pretense of clothing themselves. In classic usage naked sometimes merely meant unarmed.

Finally, it will be observed that they landed in *Aztlan*. Hence the investigator must identify first of all this locality and its synonym *Chicomoztoc*.² They are one and the same, since all accounts agree on these two places.

It is a noteworthy fact that nowhere in these accounts of the wanderings of the Nauatlaca is there a single allu-

¹ Siméon says *pepetlauhtiaque* may also be translated "in want." I should translate it "clothed in skins," or better textile fabric, grass or wild hemp. (See "Nudity Rites," p. 157.)

² In a painting giving the history of the Aztecs from the Deluge to the founding of Mexico, 1325, *Chicomoztoc* is given as the *seventh* station from *Aztlan*, but this fact may not be significant when we consider that *Tenochtitlan* was one station and *Tlatelulco*, its suburb, another.

sion to any meeting of hostile tribes. There was no fighting on the way. This fact is certainly unique in all history. The annals are absolutely silent on this question of inhabitants of the countries passed through, except one instance where the astonishing statement is made that they met people with three legs and feet like birds.¹ But it is not a reasonable conclusion that America was uninhabited at the time of the arrival of the Nauatlaca.

The *Mexica-Chichimeca* arrived at the present site of the City of Mexico in 1325, according to Chimalpahin. Other writers assign different dates varying from two to sixteen years. It has been repeatedly stated on good authority that the first comers saw on an islet in the lake, an eagle sitting on a cactus (nochtli), devouring a serpent, and from that incident they named the place Tenochtitlan, "place of the cactus." This word, however, leaves out entirely the serpent and the eagle, in spite of the corroborating evidence of the Mexican coat-of-arms. Chimalpahin asserts that the party was led by the chief Tenochtzin and it is altogether probable that, like many other founders of cities, he called the place after his own name which also means a species of cactus.

¹ This description fits the sculptures of the demons in the palace of Assurbanipal at Koyunjik. Also cf. Dr. Sven Hedin (*Harper's Magazine*, September, 1908), for realistic account of the monsters depicted on Buddhist temples to frighten away evil spirits.

CHAPTER XVI

The Aztlan Legend—Climate—The “Ten” Places of the Migration—Specific Appellations—Culture Names—Spelling of Names—List of Geographical Names in Mexico and in Asia.

It must be borne in mind that the Nahua, like the other peoples of the world, had their myths which go back to the very cradle of the race. It is no more to be expected that their myth places can be identified positively than that we can identify the Garden of Eden positively. Aztlan itself may be such a myth name, though that question will be discussed after some other names have been considered. Let us consider first: Where was the Nahua *patria*?

I have shown conclusively that Nauatl is an Aryan language.¹ Furthermore, it is closely related to Zend and Sanskrit, but nearer phonetically to the former. It is in fact older than either and is, I think, closely akin to the archaic Aryan dialects of Kafiristan.² For example, it retains the *vigesimal* system of numeration in common with them which all the classic Aryan languages have discarded. A Kafir (“infidel”) word for god is *deok*, which perhaps survives in the Mexican *teuctli*, a leader (or god). The T-ornament is still found there. This was the form of Aztec money. Animal sacrifice still exists in Kafiristan. On the head-waters of the Oxus in Afghan Turkestan we find such culture names as *Cutlers’ Vale*, *Smiths’ Vale*; *Valley of Eye-paint*. With these compare

¹ *Mexican in Aryan Phonology*.

² The Dards and the Galchas have remained *in situ* near the head-waters of the Oxus. The home of the Indo-Iranian race must have been in this neighborhood. R. N. Cust, *Modern Languages of the East Indies*, p. 32.

such Mexican names as Yacapichtlan, place of *painted noses*, Çacapechco, place of *straw beds*. Notice further that *two* of these names refer to *handicrafts*. Bronze working was carried to a high state of the art in western Asia and in Anahuac. The country is also rich in *minerals*.

Climate.—This may be as good a place as any to refer to some curious facts in meteorology. The Aztecs called the west *Cihuatlampan*, “woman’s region,” the “mild quarter.” An Algonquin legend makes Manabozho son of the granddaughter of the moon and the *west wind*. A Scottish superstition is connected with the *west wind*. “Prayers to the moon in the face of a *west wind* while it is *raining* will cause you to dream of your future husband.”¹ The beneficent winds of the Pamir region which bring the rain are southwest winds,² while in Mexico the trade-winds are *east* winds. The Aztec sacred quarter was the *west* (chap. xvii, “Baptism”). The Nahua called the sky *ilhica tliltic*, *black heaven*. In high altitudes the sky looks black.

The “ten” names.—Let us proceed to examine in detail the *ten* Aztlan names. Are any of these names common to Mexico and Indo-Iranian Asia? It certainly is to be expected that they should be so found. We have English names in America from names in England. We may expect a new series of Aztlan names in the new country and it is these *new* names which have led linguists and archaeologists astray. The “ten” names are: Aztlan, Chicomoztoc, Nonohualca, Quinehuayan, Temoanchan, Tula, Tola or Tullan, Tollan; Tlapallan or Ueuetlapallan, Amaquemecan, Tzotzompa, Teocolhuacan.

¹ *Cyclopedia of Superstitions*, Vol. III, pp. 157 f.

² Stanford’s *Compendium of Geography*, Western Asia (ed. A. H. Keane), p. 131.

1. *Teocolhuacan* has always been defined "the land of the divine brotherhood."¹ Some of the Nahuatl called themselves *Teotlixca*, "face to face with god." Here is distinctly a religious idea. In Mexico we find *Teotihuacan*, twenty-seven miles northeast of Mexico, "the sacred city." Wakhan is a district on the upper Oxus. Here we may have Teoti + Uacan, "Sacred Wakan." Siméon, however, gives a definition which precludes this, but, in my opinion, Teocolhuacan may be analyzed teo + kol + Wakan. *Kol* means a mountain-pass in Asia, in Mexican *a-col-li* is the collar-bone, but it also means *tribe*.

2. *Nonohualca* may be analyzed nono + Ualca. Nono is probably a reduplication of Noa or Nua.² Cities of this name are today found in Persia, and countries adjoining the east, as may be seen in the list on p. 149. *Ualca* phonetically answers to Ferghana, a province at the head of the Jaxartes, modern Khokand, but it may be restored as *Galca = Galcha?

3. *Quinehuayan*.—By the rules of Mexican grammar this word may be: (1) Quine-ua, land of the Khine—this name is found from the head of the Jaxartes to the Punjâb and is cognate with *China*; (2) it may be *Khin-ab*, river of the Pamirs; (3) *Khin*, a river + *ehua*, to rise, that is, source of the *Khin* river; (4) by syncope of medial *k* it might be "*Khinaka* people" but I find no such name.

4. *Chicomoztoc*, "the seven caves." This is one of the most important of the Aztlan names and one of the most puzzling. It may be discussed under three heads. (a) *Chicome* undoubtedly means seven and *oztotl*, a cave. In Russian it is *ust*, a mouth, an aperture. I shall try

¹ For the existence of a "divine brotherhood" in Asia from time immemorial, see A. P. Sinnett, *Esoteric Buddhism*, p. 50.

² This may also be *nohua*, people + *vri*, inclosed, set apart, "the chosen people," *Mexican in Aryan Phonology*, Table F.

to show that *chicome* may in this case be a homonym which does not necessarily mean *seven*, though I incline to the literal interpretation. The river Oxus is also called the Amú Daria and the *Jihun*. The last name may be restored to the ancient Gihon for *Gikon or *Chicon = Chicom. Hence we have Jihun-caves. The Gihon was one of the rivers of Eden. On the headwaters of the Oxus are numerous caves, some of which contain sculptured *colossi*, giants? Here was the ancient *Zohak*, a name which goes back to the very twilight of Persian tradition. *Zohak*, it is said, was a wicked Persian king (mythical) who invented the dreadful punishments of crucifixion and flaying men alive.¹ After his death the devil made him head gate-keeper in hell. It will at once be seen that this spot may have been "holy" for both Buddhists and the devil-worshipping Persians.² In Mexican the name for giants is, in the plural, *tzocuilique*, *zohacs* (?). This may well be an allusion to the *colossi* in the caves at *Zohak*. (b) If *Chicomoztoc* means "divine" there are two adequate explanations. (1) Sanskrit *dhī* (*chi*) means devotion; *om* is a sacred syllable, *dhik* is an exclamation. The repetition of *om* is an act of piety. This would give us "the sacred caves." (2) *Comitl* in Mexican means a vessel, earthen dish, **combitl*; Sanskrit, *kumbhá*; Greek, *κύμβη*. Hence we have *dhī*,

¹ *Cyclopedia of Superstitions*.—Professor A. V. Williams Jackson says *Zohak* was a Babylonian tyrant. In Aztec cosmogony the First Period or Golden Age was also called the "age of giants."

² The Chinese traveler, Hwen-Tsang, 630-644 A. D., found here monasteries inhabited by Buddhist monks and colossal statues of Buddha abounded. Dr. Sven Hedin (*Harper's Magazine*, August, 1908) found encircling the Holy Lake *Manasowar*, in the Pamirs, *eight gun-pas*, Buddhist monasteries. One he speaks of as being terraced. It may be partially a cavern, natural or artificial, on that point he is silent. Sanskrit *dhī* (*chi*) means sacred, *dhi-gun-ust-oc* gives us *Chicomoztoc*, without any reference to *number*. For discussion of *dhi*, see p. 39, note. *En passant*, this lake is big enough to furnish the Aryan word *boat*, *nav-is*.

holy + *cumb*, a vessel or utensil. If these were temple caves or even the secret places of worship of a proscribed sect, we get Chi-com-ozt-o-c, the caves of the holy utensils. (c) If *chicome* really means *seven* here, then we must satisfactorily connect that number with the caves, but in any case we are still at the head-waters of the Oxus. Dr. Sven Hedin mentions *eight* monasteries at the "Holy Lake" Manasowar. *One* might have been added to seven existing at the time of the Aztec exodus.

The Aztecs were undoubtedly once in contact with the fire-worshippers (see chap. xvii), in fact some of the Nahua tribes must have been fire-worshippers.¹ Zoroastrianism, then, must be taken into account. Zoroaster had *seven* ecstasies or divine revelations and tradition points yet to two of his *caves* at Mt. Sahund and Maraghah, with the fire-altar.² Below, in the chapter on "Religion," "Mithra Rites," is discussed the importance of the *cavern* in religious affairs. Dr. Sven Hedin gives a most realistic description of the present condition of hermits immured in *sealed caverns* in this Oxus-Indus country.³ Their fate is dreadful in the extreme. My own cursory observation of the "caves" of the hermits in the cañon of Mar-Saba, Judea, is in the same line, except that these latter always appeared to have a square hole left for the admission of food and water. Dr. Hedin says that his ears were everywhere and incessantly assailed with the chanting of the sacred phrase, "on mane padme hum."

It may be thought that I have too many alternatives in the case of *Chicomoztoc*. I have tried to give all the possible explanations which my investigations prompted.

¹ See "Mexico," chap. vi, and chap. xvii, "Fire-Worship."

² A. V. Williams Jackson, *Persia*, p. 61; also see note, *Oztomecatl*, p. 164.

³ Dr. Sven Hedin, *Harper's Magazine*, September, 1908.

Whether this name originally meant "the seven caves," or "the holy caves," makes but little difference, since the localities are the same in either case. In fact it may be a case of two homonyms which in the lapse of ages finally retained only the most evident meaning, and were thus merged into one word.

Seven in magic.—It is hard to escape the conclusion that *magic* had something to do with the constant recurrence of the number *seven* in antiquity. We have the seven caves of the Aztecs, the seven ecstasies of Zoroaster, the seven "castles" of the dasyus in the Vedas, the seven *Amesha Spenta*, or holy immortals, of the Gathas; the seventh day Sabbath originally an unlucky day, it is said; the siege of Jericho, in which seven priests, blowing seven trumpets of ram's horns, led the march round the doomed city for seven days and seven times on the seventh day; the seven golden candlesticks of Solomon's temple; "and there were seven lamps of fire burning before the throne, which are the seven spirits of God" (Rev. 4:5); "and the seven angels came out of the temple having the seven plagues" (Rev. 15:6); there was the book sealed with seven seals (Rev. 5:1); the beast with seven heads and ten horns (Rev. 13:1); the gates of Troy shook seven times when the wooden horse entered, and Rome was built on seven hills. Examples of the occurrence of the number seven might be repeated indefinitely. Seven was a "sacred" number among the Accadians, Assyrians, and Babylonians. The "unlucky days" of the "Farmers' Almanac" are based on this ancient cult.

5. *Tlapallan* is one of the most common synonyms of *Aztlan*. It must have been a city of importance since the Toltec astronomers met there and revised the calendar

about 134 B. C.¹ *Tla* is the usual separable prefix, hence *Pallan*, **Paltlan* **Palctlan*, becomes the Sanskrit *Bali*, the chief city of the fire-worshipers and a holy city; in Armenian *Bahl*.² In the times of the Greek Bactrian kingdom it was called Zarispa, from *zari*, yellow, some say, so called because of its bay horses, but Curzon,³ a modern traveler, was impressed with the fact that the river was of a marked red hue. The *Hari-Rud*, Red River, is today a river of Afghanistan.⁴

6. *Temoanchan*. (1) *Temo* means to descend. *Anshan* was the primal seat of the Achaemenian kings of Persia. (2) The *Pandjeh* is an important affluent of the Oxus, rising in the Pamir country. Temoanchan may have been originally **Temopanchan*, *p* often being dropped in such cases. But the first locality accords best in the main with the Aztlan names and traditions. The entire west slope of the mountain country is called by the modern Persians "the slope," *daman i-koh*, just as we speak of the Pacific slope.

7. *Tula*, *Tola*, *Tullan*, *Tollan*.—*Tul* is the name of a pass in the Hindu Kush Mountains. *Toll* is a town of east Afghanistan. The Toltecs built "The Sacred City" *Teotihuacan* in Mexico.⁵ It is not to be overlooked that *Tur* may be a Turanian word, the root of Turanian itself or from Accadian *dur*, a fortified place, as Dur-Sargina, a

¹ Review of Veytia's *Calendarios Mexicanos*, *Athenaeum*, Feb. 15, 1908, by A. H. Keane.

² I set aside Vambéry's derivation from Turkish *balik*, a city, as having no support.

³ Curzon, *Central Asia*, p. 145.

⁴ The Aztecs referred to Tlapallan as the "old red place." Doubtless the root is Sanskrit *bhraj*; Greek, *φλέγω*; Latin, *fulgur*, if *balk* meant red originally.

⁵ Fergusson says, *History of Architecture*, that no Aryan race were ever distinctly builders of great mausoleums. It remains to be seen whether these pyramids were sepulchral.

town. The Nahua doubtless borrowed words from their Turanian neighbors on the north, and from the Tibetans and Chinese on the east.¹

A positive case of borrowing occurs in Mexican tepetl, mountain, Turkish tepe, as in Geok-tepe, Greek, *τάφος*. But who borrowed? All writers agree that the Aryans were prehistoric in all the Oxus country from the Caspian to the Hindu Kush. According to Vambéry the modern Tajiks of Samarcand are of Aryan origin. Iehring places the primitive seat of the Aryans in the Hindu Kush and I think he is right.² *Altepetl*, town, suggests the Arabic article *al* or Assyrian *alu* city, but Arabic is too recent, in the country in question.

8. *Amaquemecan* may mean simply "the home land" from Sanskrit *amā*, at home + *kama*, desirable or kshema, a house; English, *ham-let*. If it is local to Mexico it may mean simply "covered with paper (see p. 142). But the root *Kam* continually occurs in Kafiristan and a more specific use of it is to be sought. There is a tribe called the *Kamoz*, and one of the affluents of the Indus is the *Khama*.

9. *Tzotzompa* is defined as "the place of human skulls," suggesting a battle-field or sacred relics.³ But Siméon defines *Tzompanco*, "the place of the pious." Going back to the highlands we find Tibetan *Tsangpo* or *Tsanpo* means a river, but the word skulls fixes this name as an appellation. It was an Aryan *Calvary*.

Specific appellations throw additional light on the subject. The *Tlacochealca* (see p. 126), were a people of

¹ Turanian dialects were spoken in Persia, Armenia, and Asia Minor, 1500 to 1100 B. C. De Morgan, *Mission scientifique en Perse*, Vol. IV, p. 183.

² See Ujfalvy, *Les Aryens de L'Indou Kouch*.

³ Compare the gruesome relics in the convent of the Capuchins at Rome and the numerous "holy skulls" of slain hermits at Mar Saba, Judea.—Cortez pitched his first camp at *Tzompantzinco* and *Tecohuac*.

Anahuac. The word *tlacochtli* means arrow, and Siméon defines the whole "keepers of the arrow house." This definition is not convincing, since we find the Nonohualca-Tlacochealca mentioned evidently as a tribe, but more likely a priesthood. *Kush* occurs in the Hindu *Kush* Mountains and repeatedly elsewhere. From a historical painting (see note, p. 143) are taken the names of the "stations" in the Aztec migration. One is *Tetepanco*, "place of the stone wall." It is a curious fact that the oasis of *Merv* was surrounded by a stone wall 172 miles in circuit by Antiochus, son of Seleucus. But if the migration was by way of China it may refer to the Great Wall. Alexander the Great also built a wall of many miles in extent to prevent the incursions of the Tartars east of the Caspian. Siméon defines *Amaquemecan*, "covered with paper." So curious a definition demands an explanation since it indicates *local* origin. For purposes of exorcism the Indian went at night into the woods, stripped naked and covered himself with *paper*, then stripping this off he fled home nude (chap. xvii, "Nudity Rites"). *Teotenanco*, "divine" Tenanco (*tenamitl*, wall), "within the walls," was evidently a *walled* city, Balkh? *Tzincuetlaxcohuatepec* is a "snake-mountain" of some kind; *Chalca-Atenco* is "*Chalca* by the water side;" and there occurs even such a combination as *Quahuitl-itech-omitl-pilcayan*, "the place of the tree on which bones were hanging." Compare the "sacred tree" of Cairo hung with rags.

A similar nomenclature prevails in central Asia today. The map of Afghanistan, Bokhara, Khiva, and northern Persia fairly bristles with compound words; instance, Nochas-Toch-Gai; Yarm-Chata-Bai-Himbese; Arki-Kurbars-Ali-Bek. Some of these names are plainly Mexican, as the tabulation at the end of this chapter will show.

10. *Aztlan* itself remains to be considered. It is perhaps the most elusive name in the whole list. It is already apparent to the reader that the ten *Aztlan* names do *not all apply to one town or locality*. They apply to a tract of country very extensive as anyone may see by consulting the map. It lies, roughly speaking, between latitude 30° and 40° north; and 53° to 73° east longitude, that is, from the Caspian Sea to the Hindu Kush Mountains. *Aztlan* in the painting of the Aztec "Migration" before alluded to, is pictured as an island with a temple and a palm tree.¹ It is a curious fact that *Chicomoztoc* is named as the *seventh* "station," although synonymous with *Aztlan*. This coincidence doubtless arose from the fact that *chicome* means seven. That *Aztlan* was *not the starting-point* is plain from Chimalpahin who records the fact that in the year 50 A. D. the Chichimecs "voyaged on the sea with oars" and finally arrived in Teocolhuacan-*Aztlan* where they established themselves. "It was an island in the middle of the sea."² But the Mexicans made *Chapultepec* a few miles from Mexico a station, the city itself was another, and *Tlatelolco*, a suburb, was another. Hence it is evident that this picture and the other accounts of the migration have no value as actual itineraries, but they appear to represent truthfully the traditions of the migration at the time they were made. It is evident that *Aztlan* remains without a definite location. It may be a myth place like Eden, or it may be in America, as all the early investigators believed. But this fact would in no wise affect the nomenclature given here for Asiatic towns and places.

¹ This painting was published in *Giro del Mundo* by Gemelli Carreri. Some think it an invention, but Humboldt appears to believe it authentic.—*Researches*, Vol. II, p. 57.

² There are islands in the Lake Urumiah held to be in Zoroaster's native country.

Let us look farther in Asia for Aztlan-Tlapallan. If the Chichimecs when expelled from their country,¹ came down the Oxus (there is a vague report of following a great river) to the Caspian Sea, they followed the old course of the Oxus, no doubt, since the Oxus now empties into the Sea of Aral. An inland people would certainly call the Caspian "great sea," "wide as heaven." They could travel on it a long time "by oar." At the extreme southeast corner of the Caspian lies *Astr*-abad, phonetically *Aztlan*. This alone has little value, and the same may be said of *Az* in the Pamirs. They need support. But there are *Balkan* Mountains near this place and on a modern map west of the Aral is *Ust* Urt which supplies the *ust* in *Chicomoztoc*. Near, in the Caspian are islands, and in the swamps no doubt were herons, *aztatl*, which are associated with *Az-ti-tlan* the old form of the word. It is to be noted, too, that Chimalpahin says (*Annals* 1272) that the Nonohualca-Tlacochealca *returned toward the East* to practice religious rites to the *sun*. Here is opportunity for equivocation. They may have simply *faced* the east.

Culture names.—The *culture* names at the head of the Oxus suggest a significant comparison. "Cutlers' Vale," "Smiths' Vale," indisputably suggest handicrafts, *metal working*. The Azteca were skilled metal workers and from *az*, bronze, Sanskrit *ayas*; Latin *aes*, bronze or copper + *teca*, Greek, τέκ-τον, we have worker, artisan. Hence an Aztec may have been simply a bronze smith, and Aztlan, the land of copper or of the bronze working industry, which greatly flourished in western Asia.² This word

¹Some of the Nahuatl tribes were expelled for rebellion. Bancroft, *Native Races of the Pacific Coast*.

²A possible objection to this derivation is that the root should be *ez* as in *ez-tli*, blood, copper color?

teca, *tequiltl*, always means occupation or business in Mexican.

Continuing on culture names we find *Pantitlan*, "the place of clothweaving." Tibet adjoins the Pamir plateau and Tibet has long been famous for cloth,¹ and Bokhara for rugs. There are no people in North America of which the same may be said except the Navajo Indians.

Another name is *Apazco* (*apaztli*, a dish, water jar). The glyph represents an earthen vessel with a stream of water running into a fissure in the earth. Nobody would think of inventing a name like this. Subterranean aqueducts were common in west Afghanistan. Or it may represent a river issuing from a glacier or entering a fissure in a glacier. The Oxus emerges from glaciers. *Atlitlal-ac-yan*, another station, means "where the water enters the earth." It may refer to these aqueducts.

The Aztlán glyph² is a bird (flamingo?) placed over the sign for water apparently alluding to the sea, with the palm indicating the tropics, but all this may be merely the fancy of the artist who doubtless lived in Mexico and painted from *tradition*. That there has been confusion and *transfer* in these place names seems established beyond doubt since Chicomoztoc is named as seventh station though synonymous with Aztlán.³

References have been made to *Ozomatli* "the divine monkey" which is named as "station 24" and is also the

¹ For an extended account in a bulky volume of the reputed discovery of Mexico by Buddhist Chinese, in the sixth century A. D., see Vining, *An Inglorious Columbus*, also bibliography of the subject in Anderson's *America not Discovered by Columbus*.

² For geographical "glyphs," see Peñafil, *Nombres Geograficos de Mexico*.

³ Chimalpahin explicitly states (Seventh Relation, year 1272) that the name Tlapallan-Chicomoztoc was changed to Nonohualca-Tzotzompa-Quinehuayan whence the Tlacochealca set out on their "migration." Does this mean a voyage up country from the "caves" over the Pamirs by way of China to the "Great Sea"? The Aztecs were left behind by the other tribes at Chicomoztoc.

"day god" of the eleventh day of the month. (See *Ozomatli*, p. 53.) This indicates a country where monkeys are found, but strange to say Chapultepec is No. 25. The monkey in the Old World is found as far north as Tibet and Japan, in the New World, as far north as eighteen degrees, possibly twenty-three degrees. They have been found in the Himalayas at a height of 8,000 to 11,000 feet, where snow and frost occur during several months of the year.¹

The spelling of geographical names.—Though I have occasionally referred the reader to my *Mexican in Aryan Phonology* I will give here for the convenience of those who do not have access to that work, a few elementary principles. A final *g* or *k* may become *j* which in Mexican is *ch* or *x* with an *sh*-sound. But this guttural may remain primitive, be changed to *sh*, or dropped entirely. In Afghan we find Púshtu or Púkhtu, the name of the language. In the same way an initial guttural may become *j* (*sh*). Thus it is legitimate to say that *khin* may become *chin*. Tla-pal-lan may have been originally Tla-balk-an. In the same way *chantli*, house, may be originally, Sanskrit *kshem*-a. A medial *r* or *g* may be dropped and its place supplied thus: *r* = *i*, *iu* or *u*; a medial *g* = *u* or vanishes, or in Avestan becomes *s*. A *b* or *p* may be dropped or become *u*. Thus *chir*-abad may have been in Mexican *Tziuh*-auat-l. *Ua* in Mexican is a possessive sign, and *uan* its plural, as, *teo-col-uan*, literally the "divine brothers." *Can*, *pan*, *yan*, *tlán*, *co*, *c*, are simply *place* signs.

In these compound words each member of the com-

¹ Montaigne, *Verses of Virgil*, gives a curious account of gigantic apes encountered by Alexander in India; ref. Aelian and Strabo. His account suggests *Hanuman*, king of the monkeys, with his valiant army.

pound may have its own specific meaning. These rules hold good for Indo-Iranian dialects as well as the Mexican. The spelling of these names varies also with the nation first transcribing them into western literature. Thus French *tchouk* is English *chook*, *djin* is *jin*. It is also common in Indo-Iranian dialects to insert "irrational" vowels and prosthetic letters as Sanskrit *rinākti*, he runs; Avestan *irinākhti*; but Sanskrit *adhika* becomes Mexican *chica*.¹

It may seem as if it were merely guessing to derive *Quinehuayan* from *China*, the Chinese, or *Khin* + *ehua*, to rise, or *Kin-ab*, a river. It cannot be all three as a matter of course. What *Khin* or *Kin* meant originally is undetermined. But it is certain that it is an Asiatic place-name. *Ehua* is Sanskrit *r* (*ra* or *ar*), Latin, orior, rise. Hence *Khin* may originally have been a mountain, a river, or a place of gathering. *Khinab* + *yan* would mean "place of the river *Khin-ab* or *Chinab*," a river of the Pamirs.

A scholar, whose knowledge of languages should have guided him better, writes me that such names may be taken from non-Aryan languages and made to fit *ad libitum*. It may be done occasionally but it cannot be done regularly. Such criticism is of a piece with the ingenious hypothesis of a certain Scotchman who tried to convince the world that the Sanskrit language was a cunning invention of Buddhist priests to deceive Christians. A professor in an English university criticized me because I had *not* made non-Aryan comparisons and an American linguist found fault because I *had made* such comparisons.

¹See Louis H. Gray, *Indo-Iranian Phonology*; and "Dialects," p. 99 *supra*.

A LIST OF NAMES COMMON TO MEXICO AND ASIA

Introductory remarks.—This comparison is a work of almost insuperable difficulty. It requires a profound knowledge of many languages, unlimited patience, and *plenty of time*. As I am not overstocked with any of these things I submit this list as the best I could do under the circumstances. Things must be made clear at the risk of some repetition, and a few words as to the general character of Mexican word-formation are necessary to begin with. The Mexican word *teca* means work, occupation, an office, tribute. Hence a tlaxcal-*teca*-tl may be one who keeps bread or who has charge of bread. A *tlaltecatl* is a superintendent of granaries or doubtless a tithing man. *Catl* has at times the same signification, as *atecapancatl*, a supervisor of ditches. But in spite of much labor, I have never been able to give a root determination to *catl* and *otl*. From these remarks it may be seen that an office or tribal appellation existing in Asia may have continued under the same name in America though the thing which gave the name no longer existed (see *pixquitl*, p. 49). Again, names purely occidental doubtless sprang up in America under these same forms. *Teca* also became linked with terms of contempt as Çoçol-teca, "dung people." *Amantecatl*¹ (Olmos, *Gram.*, p. 33) was an *artist*, hence his designation was not lost during the disorganization incident to the migration. The word is probably Sanskrit, *mā*, to measure, fit, be "handy;" *manu* quaerere is handiwork; *yezhuahuacatl*, may be the *yezidis*, devil-worshippers, *yájvan*. They were superior officers in the court, royal entourage, of Mexico. A comprehensive study of Mexican officialdom would surely

¹ Cf. the *amanta* of Peru who was at once philosopher, reciter and herb doctor. *Ized* is New Persian, a *god*, Satan?

prove profitable. But unfortunately these qualifiers in such compounds cannot be proved absolutely by cognates as can *teca* itself, from Sanskrit, *takṣ*; Greek, *τέκ-τον*. Furthermore, the original meaning of most geographical names is lost, hence phonetics alone must serve as a guide.

MEXICAN	ASIATIC
Nahua, a tribe.	Kala-Nao, Persia.
Nahua or Nohoa, the same tribe.	Shahr-Noa, Khorassan.
Tula or Tola, a city.	Toll, a town, Afghanistan; cf. Etruscan <i>Vetulonia</i> .
Amantecatī, an official.	Amantai, town, Bokhara.
Cuixtecātī, an official.	Krs, Sanskrit, to plough; krsti, tilled land, people; cf. <i>Krishna</i> .
Calli, a public building.	Kal'a, Sassanide palace; towns, Kala-nao, Kala Kumb, Kala-vamir.
Chantli, a house.	Chan-Ojuk, Chan-Kui, towns in northeast of Persia.
Nal, clear, as water or weather; a-nal-co, across the water.	Nal, a river, Baluchistan.
Milli, a field; milpa, in the country.	Mil-Omar, a town south of Merv.
Uemac, an Aztec chief.	Eimak, the four tribes, Afghanistan.
Uei, large; cf. Etruscan <i>Veii</i> .	Ve-Rud, Parsī name of the Oxus.
Me, a Mexican plural ending and Cuixtecātī as above.	Chech-me, Chech-me-Aris, towns in northeast of Persia.
Tlal-manal-co, town settled by Nonohualca after leaving Tlapallan.	Mei-man, place, northeast of Cabul.
Altepetl, gen. name for town.	Geok-tepe, town, Russ. territory.
Temoanchan, town of the migration; <i>temo</i> , in Mexican, descend.	Daman i-koh, hillside, "the slope," New Persian; <i>Anshan</i> , legendary city of the Achæmenian kings.
Miahuaque, a tribe; miauatl, a corn-stalk bloom.	Miau-ab, a town on Persian Gulf.
Quinehuayan, starting-point of the "migration."	Kin, (1) <i>Kin-abad</i> , town on the upper Oxus; Khin-ab, one of the heads of the Indus;

MEXICAN

Acolhuacan, town of the A-col-ua; a-col-li, the *shoulders*; *col*, also means tribe. Hence Acolhuacan may mean Kul-Wakan; also Teotihuacan, "sacred city" of the Toltecs.¹

Culiacan, a town.

Tlapallan, town of the migration (see p. 139).

Yacapichtlan, "place where they adorned noses."

Coxcox, Aztec Noah; Tezpi, Michoacan Noah.

Nontiaque, a Nahua tribe.

Ipal Nemoani, god.

Chal-co, "place of precious stones," 18 "station" of Aztecs.

Nonohualca, a tribe of the Nahua.

Aztec atl, an Aztec (see p. 144).

Coyohuacan, place of coyotes (Siméon).

Poyauteca, a tribe.

Aztlan, Nahua "Eden."

ASIATIC

(2) Khin + *ehua*, "the rising," head of the Khin River;

(3) The China or Chin-tan were the Chinese; cf. Ainu, *Kimun-guru*, mountaineers.

Kul in Pamirs and Alps, mountain pass; Kara-Kul, black pass; Wakan, a valley at head of Oxus. From the above may be teoti-Wakan, "divine Wakan;" Siméon, "where they conduct the gods" (teotl).

Kul, as above.

Balkh, capital of ancient Bactria, Merv oasis.

"Eye paint town," head of Oxus.

Kush, in Hindu Kush; Hydaspes River (Indus); or Vishtasp, early Persian-Bactrian king (not good if divided Visht-asp).

Belut-tag and Kara-tegin, range of the Hindu Kush.

Kan-i bal, Bala Murghab, towns, Khiva.

Chal-Ata, ruby mines and gold, Upper Oxus.

Ferghana; Baldjuan, town, Bokhara; the *Galchas*, primitive Aryan tribe in Pamirs. Merv was ancient Garjistan.

Aztecani, people mentioned by Strabo, Panjāb country.

Gorys, city on Attock (Strabo); *kāuravya*; or *kavi* + *yaj*.

Cf. *Porus*, Indian king; cf. Ainu, *poiyaumbe*, brave?

Azha, town, head of Indus.

¹ The A-col-ua were so called because they wore a *scarf* over the shoulder. The Vedic neophyte assumed a *scarf* over the left shoulder and was dubbed twice born.

CHAPTER XVII

RELIGION AND CUSTOMS OF THE NAHUA COMPARED WITH THOSE OF ASIA.—General Remarks—Religion of the Nahuatl Composite—Human Sacrifice—Fire-Worship—The Blood Sacrifice—Izcalli the Resurrection—The Unleavened Bread—Winter Solstice Festival—Rites of Mithra—The Descent into Hell—Aztec Future States—Nudity Rites—Immaculate Conception—The Cross—Prophecies of a Savior—Confessional and Absolution—Baptism—Marriage—Births—Burial—List of Deities Common to Mexico and Asia.

General remarks.—The title of this chapter should not lead the reader to expect an extended and detailed treatment of a subject which in itself would require a volume for its elaboration. I shall give only a brief outline of a few matters which I consider significant since my book must rest on its *philological* aspect for its vindication before the world. A few thoughts to begin will be in place regarding the significance or non-significance of the items set down. It is unscientific and unsafe to base claims of genetic relationship between two tribes or nations on *casual resemblances* in language, traditions, or national customs. Many such resemblances may have originated independently, though I think some writers carry their incredulity beyond the bounds of reason and consequently accomplish little or nothing. For example, traditions of the deluge appear to be universal. They point to the original unity of the human race but are not conclusive. The same may be said of serpent worship which appears to have been universal. The moon, the owl, and the rabbit appear to be nearly universal objects of adoration or fear and the mirror myth is certainly old Aryan. The fire

myth is probably universal. From the nature of fire and its early use such must be the case hence the fire and the sun cult except in specific applications is non-significant.

Religion of the Nahua composite.—The religion of the Nahua was no doubt *composite*. From the habitat of these primitive tribes in the region around the head-waters of the Oxus and the Indus they must have been acquainted with the gross superstitions and idolatry of the primitive Aryans, the astrolatry and ophiolatry of the Turanians, the Accadians, and the Babylonians, likewise with the purer cult of the *fire-worshipping* Persians and the strange sect of *devil-worshipping* Persians.¹ The religion of the Nahua appears to have borrowed something from all these. The Toltecs, it is agreed, had a milder and purer form of religion than the Aztecs. Their chief deity Quetzalcoatl was a serpent god, but in the form of a man he taught the useful arts. Besides, according to Canon Rawlinson, the serpent was originally beneficent, only in later times did he become the enemy of mankind.²

Human sacrifice.—According to Clavijero the Aztecs instituted the abominable practice of human sacrifice only about two hundred years before their advent into Anahuac. But this is to be doubted, considering the origin of that people, and they undoubtedly brought it with them from Asia. Human sacrifice, says Dubois, existed in India within the lifetime of old men with whom he had conversed, and that is but little over one hundred years ago. In 1733 the Frenchman Renaudot saw girls devoted to the *Bûds* or evil spirits and Forlong remarks that he fears the same thing may be done yet when the vigilance of the

¹ *Izedis* or *Yezidis*, still numerous. Dr. Paul Carus, *History of the Devil*, p. 63. Cf. Japanese, *Yezo-jin*, dwarfs.

² See note 2, p. 123.

government relaxes.¹ I will give two specific instances of Aztec sacrifice. In preparation for the festival of Tezcatlipoca, the victim who personated the god was a handsome young man. He was carefully attended and greatly honored. Twenty days before his immolation, four maidens were assigned to him with whom he had carnal conversation. On the fatal day he marched with honors to the sacrificial block. Children were sacrificed to Tlaloc the god of rain. They were immured alive in a cave or thrown into a whirlpool in the lake.²

Fire-worship.—From their original seat in the Pamirs, the ancestors of the Nahua must have come in contact with the fire-worshiping *magians* who carefully guarded their sacred fires. Where was the field of Zoroaster's chief labors? There is some doubt on this point. Professor Jackson is positive, with very convincing reasons, that Zoroaster was born in northwest Persia near Lake Urumiah.³ But a host of authorities agree that the chief field of Zoroaster's labors and the place of his death must have been Balkh the capital of ancient Bactria. The Parsis of Yezd at the present day, says Jackson, know nothing of the Urumiah legend. I think it safe to conclude that the Aztecs got the fire element in their religion from the fire-worshippers of Balkh (Tlapallan?). The Aztecs kept these fires burning day and night in the towers of the great *teocallis*,⁴ and their extinction was considered a calamity. Once in 52 years all fires were extinguished and relighted with solemn ceremonies including human sacrifice (see p. 101). According to Ujfalvy evidences of

¹ J. G. R. Forlong, *Short Studies in the Science of Religion*, pp. 102-12.

² Sahagun, *Cosas de la Nueva España*, Bk. I, cap. v.

³ A. V. W. Jackson, *Persia Past and Present*; and same author, *Zoroaster*.

⁴ The great temple of Mexico was inclosed by a stone wall. The enceinte contained about 70 chapels, cú; 5,000 priests were attached to this service.

the old fire-worship exist today, even among Mahomedans, all over the ancient Bactria and the Pamir country. For example a Tajik will not blow out a candle with his breath but uses his hand or a fan. He will not spit in the fire. They also have a "fire cure."¹

The blood sacrifice.—The self-tortures and penances of the Aztecs continually remind us of similar horrors practiced in India from time immemorial. They gashed themselves with knives on the cheeks, ears, and thighs and smeared the blood over their countenances. They pierced the tongue with a maguey spine and forcibly drew twigs or grass stems through the wound. They went *naked* to the woods and placed these bloody agents of torture on a sort of cage made of canes. The women kept up these hideous rites for five days, the men for eight days before an approaching festival of a god. Devotees bought pheasants and beheaded them in the temple precincts, then dipping white paper in the blood which was caught in a vessel they went round the sacred inclosure smearing the mouths of the various gods with blood.²

Izcalli, or itzcalli, the resurrection.—The feast of Izcalli was held at the end of the year of 360 days after which came five days called *nemontemi*, superfluous days, literally, "they fill up." This end of the year feast corresponded in a general way to the Christian Easter.³ It was a time of general rejoicing. Meats were roasted and to each person was given a *nauhquiltamalli* or cake. The food was eaten hot and wine drunk. In the fire sacrifice of the Zoroastrians little cakes with small pieces of holy

¹ Ujfalvy, *Les Aryens de l'Indou Kouch*, pp. 95 ff.

² Sahagun, *Cosas de la Nueva España*, appendix to Bk. II.

³ The idea of the resurrection was Mazdian rather than Jewish, Samuel Johnson, *Oriental Religions*, pp. 138 ff.

meat were eaten and *haoma* (soma) was drunk.¹ Human sacrifice occurred in bissextile years.² In these last years *Paynal* was introduced. He was an emergency lieutenant, vicar, of Uitzilopochtli and originally was not a god but a man. Compare the man-god Jesus.

The unleavened bread.—This festival would appear to suggest the Jewish feast of unleavened bread, but it was probably of wider signification. The *atamalli*, "water cakes," were made of meal and water, not even salt was added. This feast occurred only once in eight years.

The winter solstice festival to Uitzilopochtli was a time of blood-letting penance, fasting, processions as preliminaries. An image of the god was made from dough mixed with the blood of sacrificed children who were bought or offered voluntarily. In the bread were put seeds of the *nauhquilitl* (savory, *Satureia hortensis*) and the whole was baked. A priest shot an arrow into the heart of the god. The heart was then eaten by the king and a piece of the image was given to every man, but no woman was allowed to partake. Compare with this the fact that no woman was allowed to recite the Vedas or perform sacrifice without the presence of her husband. A similar feast takes place today in Persia (see *Izcalli*).³ Compare this with the Christian sacrament in which the body of Christ is supposed to be eaten. The eating was called *teoqualo*, "the god is eaten." Concerning the devil-worshippers,⁴ Carus relates the story of a German traveler who asked one of these people why they worshiped the devil. The naïve answer was, "why should not the devil

¹ Dr. Paul Carus, *History of the Devil*, p. 57.

² For a description of the festival see Sahagun or Bancroft, *Native Races of the Pacific Coast*, Vol. III, pp. 288-324.

³ Dr. Paul Carus, *History of the Devil*, p. 69.

⁴ *Ibid.*, p. 64.

help us since we are the only people who ever helped him?" Tezcatlipoca, the Mexican devil, in his contest with Quetzalcoatl and the Toltecs certainly acted up to his reputation.

Rites of Mithra.—The Mithra cult originated in Persia at a very ancient date. W. S. Brackett compares the rites of Mithra with those of the god Uitzilopochtli. The neophyte in both cases after undergoing an ordeal of horrors, some of which occur in a *cave* or subterranean chamber, is hailed as "born again." Compare this with the Vedic "twice born" and the Christian "born again." The author gives two illustrations side by side of Mithra and Uitzilopochtli. The figures are strikingly similar, both surmounting a globe and both accompanied by the bird and serpent emblem.¹ Curiously enough Mr. Brackett arrives at the conclusion that *Persia was settled from Mexico*.

Descent into hell.—The rites of Mithra and Uitzilopochtli which were *underground*, the sacrifice of children to Tlaloc in a *cave*, the holy *caves* of Zoroaster, the terrible self-immolation of Buddhist devotees in dark, sealed *caverns*, the descent of Christ into *hell*, all point to a common origin and cause, the desire to make the penance as dreadful as possible in *darkness* and secrecy. "Stations" 3 and 4 in the Aztec migration were "the places of humiliation and *grottoes*."

The Aztec future states were three: (1) *Ilhuicac*, region of brightness according to the Sanskrit, or rocaná; Latin, lux; (2) Tlaloc's, *terrestrial paradise*, a beautiful land of streams, fruits, and flowers where squashes and corn grew without the trouble of cultivation; (3) *Mictlampa* or hell, as some writers define it, but, in the Nauatl language, simply "the land of the dead."

Compare these three states with heaven, purgatory,

¹ W. S. Brackett, *Lost Histories of America*, p. 138.

and hell. The belief in the immortality of the soul was Aryan and Zoroastrian, also the belief in angels.

Nudity rites.—Barth gives the following as a very curious example of the belief that nudity was efficacious in some observances. "If a man takes seven cotton threads, goes to a place where an *owl* (Tlacatecolotl) is hooting, strips naked, ties a knot at each hoot, and fastens the thread round the right arm of a fever patient the fever goes away."¹ The Aztecs had rites which necessitated stripping nude in the woods and fleeing to the house naked. Chimalpahin says the Chichimecs landed *naked*. A Latin author, Virgil, I think, exhorts the husbandman to plow naked and sow naked. This has been construed to mean *unarmed* but perhaps in some cases it should be taken *literally*.² Strabo records that the Gymnetae (naked) of India lived in the open air practicing fortitude for the space of thirty-seven years, and were singularly esteemed. When Onesicritus desired to converse with Calanus, an Indian Sophist, the latter asked the Greek to strip naked and lie down on the rocks beside him before the discourse began.³

The Immaculate Conception.—There was a Zoroastrian prophecy that a *virgin* would give birth to a savior.⁴ *Uitzilopochtli* was begotten by immaculate conception but unfortunately for the parallel his mother was a widow and the mother of grown children.⁵ These the monster promptly slaughtered immediately after his birth. A late writer takes the ground that Jesus was an Aryan.⁶

¹ A. Barth, *Religions of India*, p. 279.

² Fort William, Ont., April 9, 1908. "Doukhobors again commenced parading naked on the streets here this morning."—*Chicago Tribune*, April 10.

³ Strabo (Bohn's Library), Vol. III, p. 112.

⁴ Countess Martinengo Cesaresco, *Contemporary Review*, October, 1907.

⁵ Clavijero, *Storia di Messico*.

⁶ Professor Paul Haupt, Congress of Orientalists, 1908, cf. letter to the *Nation*, September 10, 1908.

The cross was a pre-Christian symbol. When Quetzalcoatl landed at Pánuco he wore a handsome robe adorned with crosses. The cross is frequently found in the ruins of Yucatan and in the oldest Cretan excavations.

Prophecies.—The Aztecs believed that *Quetzalcoatl* would eventually return and redeem them from a condition which they considered “fallen.” A bull predicted the coming of Zoroaster 3,000 years before his birth and an ox spoke his name 300 years before. All these parallel the prophecies concerning the coming of Christ.

Miracles accompanied the birth of Zoroaster. He even had a *Herod* in the person of a Turanian king. He disputed with the wise men.¹ He was tempted by the devil.² He recognized three divine principles, Glory, Spirit, Substance, a close parallel to the Christian trinity.

The confessional and absolution were also distinctively Aztec, but they differed from the Christian confessional in this important particular: Confession was made but *once in a lifetime*. If the penitent transgressed again he could not be absolved a second time, consequently it was usually deferred till late in life. The ceremonial was solemn and impressive, and if Sahagun describes it literally it represented a very high order of piety and a profound appreciation of the importance of the act.³

Baptism.—Sahagun describes in full the ceremonies attendant on the baptism of a child. They chose the most prosperous “house” in the sign for the ceremony. It was a day of feasting for all the friends of the family “y tambien á todos los niños de todo el barrio,” “and likewise to all the children of the quarter.” The boy faced

¹ A. V. Williams Jackson, *Zoroaster*, pp. 61 ff. For prophecy of Messiah same author, *Biblical World*, August, 1896.

² Conway, *Solomon and Solomon's Literature*, p. 186.

³ Sahagun, *Cosas de la Nueva España*, Bk. V, cap. vii.

the *west* and drank of the water. The fingers of the officiating personage (midwife) were dipped in the water and touched to the child's mouth.¹ The ceremonial differed slightly for girls.

Births.—At the birth of an Aztec child the astrologer or *naualli* was always consulted regarding his star and the auguries. The Parsis call the astrologer on the seventh day after birth.² In fact the Aztecs consulted the *naualli* on the most trivial occasions such as the hooting of an owl near the house. At the birth of Louis XIV, the astrologer Morin de Villefranche was concealed behind the curtains to cast the nativity of the future monarch. An Aztec book of magic was called *tonalamatl* from *tonalli* and *amatl*, paper. *Tonalli* is cognate beyond question with Hindustani, *tonhā*, a magician. The Aztecs called a magician *naualli*, which may be derived from the Sanskrit, *nakta*, night; Latin, *nox*; and *vara*, the time or turn of a planet. Or it may be connected with *nauī*, four as a "sacred" number in magic.

Marriage among the Aztecs was a matter of great importance. At the marriage of a son the old women "go-betweens" were employed just as in the Orient today. They sought out the parents of the girl who was the preference of the parents of the young man and obtained their consent. Then the *telpuchtlato*, a sort of pedagogue who had charge of boys, brought home the son to his parents and in a speech formally resigned his charge and delivered the boy into the care of his parents, laying at his feet an axe as a sign that the tie between himself and the boy was severed. A feast followed for the *telpuchtlato* and all the boys under his charge. The groom's friends

¹ Sahagun, *Cosas de la Nueva España*, Bk. II, cap. xix.

² *Encyclopaedia Britannica*, article "Parsis."

went by night to bring home the bride. There was a torch-light procession in which all the friends joined. Among the Parsīs today the procession is formed at sunset. The bride and groom were seated by a fire (the Parsīs light a lamp) in the center of the hall in the groom's home. The mother of the groom laid at the feet of the bride richly embroidered underclothing and the mother of the bride put on the shoulders of the groom a handsome *uipilli*, tunic, and laid a richly embroidered *maxtlatl*, belt, at his feet. Then the *titici*, "wise old women" in this case, tied a corner of the groom's tunic to a fold of the bride's, and the ceremony was complete. The Parsīs tie the right hands of the bride and groom with a silken cord, winding it round their bodies. Feasting and dancing followed.¹ The entire ceremonies occupied several days. The points of resemblance between this Aztec ceremony and the marriage ceremony in India to be specially noted are these: in India the *hearth-fire* plays the same important part and the bride and groom sometimes are *tied* together with straw of the "sacred grass."

Burial customs.—Mr. Tylor says the burial customs of the Aztecs may be adequately illustrated by the ceremonial of burying a king. The corpse lay in state invested in the mantle of his patron god. The deceased was furnished with a jug of water, some pieces of cut paper (see *Amaquemecan*), and garments to protect him from the elements on his journey, and a dog was sacrificed to accompany him. In earlier times the body was buried sitting upright² surrounded by slain attendants, later it was burned on a funeral pile with accompanying sacrifices

¹ Sahagun, *Cosas de Nueva España*, Bk. II, cap. xix.

² *Galla*, daughter of Theodosius the Great, thus sat in state for more than a thousand years in her mausoleum at Ravenna.

of attendants. The Ptolemaic Greeks also equipped the dead for their long journey—in one case a coin, a staff, and a *book*. Ibn-Foslan, an Arabic traveler in Russia in the ninth century A. D., describes a burial which is almost a duplicate of the Aztec, but in the case of the Slavs a man and a woman *volunteered* to accompany the dead, and a *horse* was sacrificed.¹

Deities common to Mexico and Asia.—It has been said that the Nahua had no general name for god. This is a mistake. Their generic name for deity is *teutl* or *teotl*, a god, any god. It is cognate with Sanskrit, *devatá*; Hindi, *deotá*; Latin, *deus*. As may be seen by these comparisons the Christian religion is largely Aryan in origin rather than Judaic which may be accounted for by the protracted captivity of the Jews at the court of Persia. But future investigations may establish the fact that the Aryans borrowed their religion from Turanian sources.

NAMES OF A FEW OF THE DEITIES FOUND IN AMERICAN LANGUAGES

This list is not given as absolute, or complete.

Uitzilopochtli, Sanskrit, *bhaj*, *bhaga*; Persian, *Baga*; Russ., *Bog*; Algonquin *Mana-bozho*.

Quetzalcoatl, Babylonian *Hoa* or *Koa*? the serpent-god, also Turanian serpent-god.

Tetsauitl, a prodigy, Sanskrit, *dasá*, evil demon + *vid*, to see.

Manit or *Manitou* = *Ma* + *an-it*, *Anna*, *Ana*, *Anu*, Babylonian, Turanian, Aryan.

Nanepaushadt, apparently *Na*, *Anna* or *Anu*, and *Baga*. *Nepau* is possibly *Nebo* and *Anna*, Babylonian; Egyptian *Anu-p(?)*, the hawk, which involves a confusion of names with the order reversed; compare, Egyptian *Pasht*, the cat-god, *Nebe-hat*, and *Hat-hor*.

¹ Alfred Rambaud, *History of Russia*, Vol. I, p. 40, Eng. translation.

Tlaloc, the Mexican Indra (see chap. iii). There were in all eight Tlalocs; compare the *eight loka-pālā*, "world protectors" of the Vedas.

Siva, Sanskrit, "the gentle one;" *ciuatl*, a woman, Mexican.

Sarva, Sanskrit, another name for *Siva*, perhaps *Xelhua*, who built the pyramid of Cholula.

Tecuiztecatl, god of the sun, Dag-on (?). Said to come from *dag*, a fish, but is a crab in Mexican, but better Sanskrit, *daghs*, Mexican, *tekis*, + *teca*, "fire care-taker," i. e., the sun.

Tlaccatecolotl, "the man owl" (see chap. vi).

Uitznauatl, god of condemned slaves, Vishnu (?) or Sanskrit, *vish*, plebs + *nauatl*.

Ozomatli, "the divine monkey," Sanskrit, *vṛshā-kapī* (see chap. vi).

Chon, Peruvian, *Vul-can*, *Baal-can* (Falb).

Conn, an Irish god or giant who overwhelmed his enemies with snow; Algonquin, *kon*, snow; also Turanian of central Asia.¹

Nanauatzin, Mexican moon-god, *Ana*. (See Nanepaushadt above, also *Mexican in Aryan Phonology*, n. 12.)

Tezcatlipoca, Mexican devil; compare universal Aryan bad-luck legends connected with the looking-glass (see chap. vi).

Tonantzin or *Teteo innan*, Mexican, "mother of the gods," Vedic, *Aditi*.

Ipal nemoani, Babylonian Bel? Nebo-Ana?²

Remarks.—At the festival of the Aztec god *Xipe* the victims were *flayed*. Clavijero relates a horrible act, the flaying of a maiden who personated "the Mother of the Gods." *Cybele* was the *mother of Zeus* and was closely associated with *Marsyas* who was *flayed*. *Mani*, founder of the Manichaeans, was *flayed*. Hence flaying may have been a religious rite rather than an act of cruelty. *Xipe* may be *Cyb-ele*.—Compare *Mana-bozho* with *Máná rabbá*, "the Great Spirit of Glory" of the Mandaeanes.

¹ See the account of Sergeant Bagg's combat with the "Fairy Man" which was suddenly terminated by a blinding snow-storm. *Lav-engro*, chap. xii, George Borrow. Also see Marco Polo's and Fa-Hien's account of the dangers of the desert of Gobi. The latter speaks of dragons that spit sand-storms and snow-storms, time, 402 A. D. *Dawn of Modern Geography*, Vol. I, pp. 479, 480.

² The number of deities in the Mexican pantheon was thirteen major, two hundred minor. Prescott, *Conquest of Mexico*, Vol. I, p. 58.

CHAPTER XVIII

Aztec Civilization not Indigenous—Home Land—Learning and Arts—Domestic Life—Education—Ethics of Their Religion—Priests—Economics and Government—Cannibalism—Nahua Disposition and Courage—Influence of Superstition on the Conquest.

One thing is certain. We must dismiss all notion that the Nahua developed an indigenous civilization on American soil in spite of assertions to that effect by prominent writers. They distinctly inherited the old Aryan culture of western Asia. Whatever may be said of that, may be predicated, with modifications perhaps, of the people of Anahuac. These people were not barbarians. They may be classed with the Vedic Hindus and the Greeks of the Homeric age. The Aztecs could never have been on as low a plane as the northern savages, such as the Eskimo, or the Athapascans. To give the beginnings of their culture is then to restate the beginnings of the most primitive Aryanism which is perhaps today best illustrated in Kafiristan and the Hindu Kush region.

Home land.—According to tradition the original seat of the Nahua was a land of cheer, and they dearly loved that land as their traditions testify. It was a beautiful land of forest, stream, and savanna, a glorious land; but this may be the myth of an Eden. They or their neighbors were builders of cities and of imposing edifices. They had wealth, considerable wealth, as *xiquipilli* and *cuilttonoa*, to prosper, testify. The *xiquipilli*, a purse, contained 8,000 pieces. Who but a commercial people would have occasion to handle such a sum of

money? Were the standard but five cents it would equal \$400. They had *two* names for *merchant*,¹ and a verb meaning *peddle*, all indicating an established commerce.

The word *macehualli*, servant, vassal; Hindustani, *wallah*, may indicate that the Nahua in Asia held slaves or lived under a feudal system, according to the universal custom of the age. But the local conditions in Mexico may well have brought *cuiltonoa* and *macehualli* into use.

Learning and arts.—The Aztecs understood to a certain degree the science of astronomy. Their ancestors revised the calendar years before it was revised by Julius Caesar (see p. 139). At the time of the conquest it was practically correct, while the reckoning of the nations of Europe was wrong by about ten days.

The Aztec gold- and silversmiths produced beautiful work which was highly prized and eagerly sought by the Spaniards for its artistic value. The Aztec *feather pictures* were unique in kind and admirable in execution.

The Nauatlaca had written records in picture writings which were called *tlacuilolli*. That these writings were capable of sustained narrative cannot be doubted. But the Spaniards destroyed most of these writings and the knowledge of their accurate interpretation has been lost.²

Domestic life.—In favor of their home life much may be said to their credit. The Nauatl language abounds in terms of endearment such as "my dear little son," "my jewel," "my esteemed wife," or "honorable wife." Friends were always addressed by the term *tzin*, honorable, or *icnihtze*, friend. It may be said in objection that oriental courtesy is a mockery, and the free use of

¹ The word *ozto-mecatl*, merchant, is plainly connected with *oztotl cave*. But in Russian *ust* means mouth, opening, thus the word must have meant not only cave but the *open front* of a shop in the bazars. (See Chicomoztoc.)

² On one occasion a bonfire of MSS, lasting several days, blazed in the streets of Tezcuco.

“honorifics” a mark of servility. But the same criticism has been made regarding French politeness by people who have much less real politeness than the French. Etiquette may be abused by sycophants and knaves, but etiquette was not invented for sycophants and knaves.

It would be wholly foreign to my work to go into lengthy details of the domestic life of the Nahua—dress, customs, cuisine, music, education, art, books, etiquette. I have confined myself rigidly to one purpose—to show the connection of these people with the people of Asia.

Education.—The greatest care was bestowed upon the education of children as evidenced in the “Address of a Father to his Son,” and the “Address of a Mother to her Daughter.” In the latter the consequences of infidelity to the marriage vow are depicted with great force and striking realism. The telpuchtlatō had charge of boys (see p. 159).

Festivals.—They had feast days and holidays on which everybody turned to play and rejoicing. Flowers they greatly loved and the feast of *xocouetzi*¹ was consecrated to the apple tree, *xocotl*, which Siméon thinks was the *malum* or apple of the Romans. The religious festivals, it is true, were sometimes marred among the Aztecs by revolting human sacrifices, but some of the other tribes looked on this custom with horror.

Ethics.—This last remark brings us to consider religion (already treated at some length), than which no other human institution is more easily misunderstood by foreigners. Much has been written about the sanguinary and monstrous god of war, *Uitzilopochtli*. But as I have shown (chap. xiv), his name means simply “the Giver,” though the irony of fate converted him into a devil.

¹ The month *Xocouetzi* extended circa August 17 to September 5.—Siméon.

The god *Tlaloc*, "Lord of the Terrestrial Paradise," was a New-World Indra (see Indra, chap. iii). He was the beneficent giver of rain and the source of agricultural prosperity. He contended with the adverse spirits of heaven. The Aztec Venus was perhaps identical with the Greek and Roman Venus, simply a goddess of pleasure. The world practices her cult today, dispensing with the formality of announcing a cult and appointing a patroness.

Priests.—The Aztec priesthood formed a distinct and powerful caste. They apparently possessed unbounded influence over the people. Doubtless they differed in no respect from the priesthood in all ages and all countries—some were sincere, good men, others took advantage of their sacred calling for their own advancement and profit.

Economics and government.—I shall not go into the question of Aztec internal polity, form of government, and land tenures. That has been done well already by others.¹ But this question inevitably arises: Why did not the Aztecs, and other Indians as well, rise to the condition of a stable civilization and a well-ordered state? This question has nothing to do with philology and I shall give my opinion in a line. They lacked *beasts of burden and a reliable, abundant food supply*. The Nahuatl had corn (maize), squashes, perhaps sweet potatoes, native fruits, including the banana, seven kinds of tomatoes and chocolate. But they lacked three things essential to a high civilization. *Wheat* (or rice), *meat*, and a *root crop* capable of preservation.

Cannibalism.—With respect to human sacrifice and the attendant cannibalism, Aztec character has been

¹ Notably, Lewis H. Morgan, *Ancient Society*, and A. F. Bandelier, *Peabody Museum Report*, 1876-79.

painted in the blackest colors. Some of this color or bias at times sprang only too evidently from bigotry, again from ignorance of the subject in its broader aspects. I make no defense of this monstrous rite as it was practiced by that unfortunate nation. Their excesses were revolting. But to my mind there appears to be some slight extenuation. All the human race once believed in human sacrifice and practiced it. It existed secretly in India within the memory of very old men lately living, indeed it may exist yet. The curious "horse sacrifice" still existed in Russia as late as the sixteenth century.¹ It may have been a Vedic survival but there was also a "horse sacrifice," *aswamedha*, existing in India. Animal sacrifice still exists in Kafiristan, in the Hindu Kush region. If the whole world once believed a thing, why should the last man to believe it be crucified?²

It is said that the Aztecs introduced human sacrifice only about two hundred years before the conquest, according to Clavijero.³ But this, as stated in chap. xvii, is doubtful. It was the act of a decadent tribe, an atavism, which led in the end to the most dire consequences. The effect on Aztec character was fatal. From bravery they passed to bravery plus heartlessness. It is generally conceded that the lack of an adequate *meat supply* greatly aggravates the practice of cannibalism, and the Spaniards also felt this need. They killed and ate the native dog *itzcuintli* until they exterminated him.

This feature of Aztec religion reacted on their civil polity. Instead of cementing their empire by a wise

¹ Max Müller, *Mythology*; also Alfred Rambaud, *History of Russia*, translation of Lenora B. Lang, Vol. I, p. 40. As to the present existence of human sacrifice in India, cf. Jastrow, *Religions of India*, p. 529, and Hunter, *Encyclopaedia Britannica*, article, "India."

² An authentic case of human sacrifice has occurred in Mindanao, P. I.; *Nation*, "notes," Nov. 12, 1908.

³ Clavijero, *History of Mexico*, Vol. I, p. 120.

policy of organized assimilation, which the Romans, of all people, best understood, they conquered for the sake of fighting, for spoliation, and for the purpose of obtaining victims for their abominable sacrifices. Thus when the final crisis came their ill-organized state was resolved into its discordant elements, their allies became their enemies, and the only Indian state in North America became a thing of the past.

The Aztecs threw away the greatest opportunity ever offered to a people to found a new and magnificent empire on a virgin continent. But if we believe in fate then fate so willed it. The Aryan brothers of the Aztecs, from Europe, equaled them in courage and excelled them in knowledge. The civilized Aryan of Europe had utilized gunpowder and *learned how to shoot*.

Nahua disposition and courage.—All writers appear to agree that the Toltecs possessed the highest civilization existing among the Nahuatlaca. They were not addicted to cannibalism and human sacrifice, so far as is known. Clavijero says of the Chichimecs: "With respect to their customs, they were certainly less displeasing and less rude than those to which the genius of a nation of hunters gives birth."¹ They worshiped the sun. Their life was simple, they lived on game, fruits, and roots.

The Aztecs certainly equaled the Greeks in bravery,² but they have been accused of deceit and treachery. By whom? By Christians who wreaked a horrible vengeance on the Tlascalcan envoys; who burned Chimalpopoca at the stake; who pledged protection to Cauhtemoctzin and then hanged him; who resorted to trickery to get Montezuma into their power and then subjected him to

¹ Clavijero, *History of Mexico*, Vol. I, p. 120.

² See Henry Cabot Lodge, *As to Certain Reputed Heroes*.

a bitter and unmerited humiliation; who won victory by the aid of *Indian allies* and then treated those allies no better than they treated the vanquished Aztecs. At times the simplicity and dignity of Aztec character stands side by side with that of the Greeks in their best days. Instance the death of Tlakahuepantzin, son of Axayacatl. Chimalpahin says simply: "Mo-yaomiquillito Huexotzinco yn Tlakahuepantzin."¹ He died in war at Huexotzinco. This simplicity of statement regarding the death of a prince is paralleled only by the Greek memorial tablets in the cemetery at Athens, "he died at Syracuse." How brief is martial glory!

The Tlascalans, on the other hand, rivaled the Aztecs in courage and ferocity.² But the Aztecs were distinctively the warriors of Anahuac. I have before compared them with the Greeks of Homer's time. They cut a large figure in their day. They gave *twenty-seven chieftains* to the world from *Uitzilton*, born 1087 A. D., to *Nanacacipactli*, the last Aztec governor of Tenochtitlan under the Spandards, died 1565 A. D.³

Influence of superstition on the conquest.—There was a current belief among the Nahua at the time of the conquest that the "end of the world," that is, of the present order of things, was approaching. Quetzalcoatl, "the Fair God" (white), had been banished from the country centuries before, or rather got rid of by his rival *Tezcatlipoca* under false pretenses. There was a tradition that he would return (with white men?) to reform his people and restore a better condition of society. The Mexicans sent a delegation to interview Cortez soon after his landing.

¹ Chimalpahin, *Annals*, Seventh Relation, year 1495.

² Without his Tlascalan allies Cortez could never have succeeded. Fatuous people who prepared their own destruction!

³ Chimalpahin, *Annals*, Seventh Relation, year, 1565.

Their report was: "*In aquin oquiçaco in teotl tonantiz, totatiz.*" He who comes (has just come) is a god, our Mother, our Father. There is no doubt whatever that the conviction that a long-standing prophecy was about to be fulfilled greatly facilitated the work of conquest by extinguishing hope, which gave way to a dire fatalism.¹

It may be noted finally as a very remarkable fact that the followers of Zoroaster believed that this regeneration of the world would take place 3,000 years after Zoroaster. If we accept the date 1500 B. C. (some say 660 to 800 B. C.) as the beginning of the Zoroastrian era, then 1520 A. D., the date of the conquest, completes 3,000 years with sufficient accuracy. Lest this paragraph provoke a smile I will ask the reader to consider carefully and weigh well the entire case as made out in this book from first to last. He only is a competent judge who decides *after* he has weighed *all* the facts. Any other judgment is miscalled. Its proper name is *prejudice*.

¹ Montezuma consulted the king of Tezcuco concerning the *Tetzauitl* (p. 117). Montezuma, who had been a priest and was naturally of a gloomy disposition, believed it to be a dire omen. The Tezcucan was inclined to laugh at it, so they cast lots to see whose opinion should prevail and Tezcuco won! *Alea jacta est!*

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INDEX

- A
- Absolution, 158
 Accadian, doubt of, 19
 Accent, 99; and rhythm, 74
 Adverbs, Mexican, 41
 Aesir, god land, 124, 130, n.
 Age of Mexican, 59
 Agglutination, colloquial, 78; discussed, 80
 Ahura Mazda, 54
 Ainu, Aryan, 88, n., 128, n., 150
 Altepetl, town, 118
 American race, origin, 10, n.
 Anahuac, 112
 Analysis, 30
 Animal sacrifice, 134; horse, 161, 167
 Animals, names, Aryan, 72, n.
 Animate and inanimate, gender, 66
 Anshan, 140
 Ape, Mexican-Sanskrit, 53
 Apple, xocotl, festival of, 165
 Ark, 119
 Arrow, tlacochtli, 127 and n.
 Artemis, 51
 Aryan, color, 21, 118; roots, 21, 26; habitat, 72, n.; name for *boat*, 137, n.
 Aspiration, 91
 Assimilation of sounds, 99
 Assyrian, infinitive, 59; pronouns, 60; "mekh," 54
 Astrology, 159
 Augment, 59, 62
 Australian, changes of names, 88
 Axayacatl, the Great, 108
 Aztec, primal curse, 54; migration to Anahuac, 125; historians, 111; books, 111; bronze workers, 123; money, 134; future states, 156; domestic life, 164; ethics, 165; government, 166; cannibalism, 166; civil polity, 167; priests, 166; courage, 168; fatalism, 170; marriage, 159
 Aztlan-Chicomoztoc, 127; synonyms of, 128, n., 129; described, 131; "ten" Aztlan names, 135; painting of, 143; etymology, 144
- B
- Bactria, 140, 153, 154
 Bad luck, left hand, 115; mirror, 50; owl, 49, 50, n.
 Baptism, 158
 Bel, Baal, 118
 Bird and animal attendants of gods, 116
 Births, Aztec, 159
 Bite, root, 27
 Blood sacrifice, 154
 Bog, god, 116
 Bogy, Bōd, 27
 "Born again," "twice born," 156
 Boturini, 130
 Bridle, Mexican word for, 76
 Bronze, 144
 Buddhists in Mexico, 145, n.
 Bull, 158; *see* Ox
 Burial, Aztec, 160
- C
- Calendar, Aztec, 101; revised by Toltecs, 139

- Calli, house, 118; in New Persian, 149
 Calpolli, cosmopolitan, 35
 Calvary, Aryan, 141
 Cannibal, in Tupi, 38; *see* Aztec
 Case signs, 57, 83
 Caspian Sea, 142, 144
 Cauhtemotzin, death of, 69, 168
 Cave-dwellers, 128, n.
 Caves, seven, Chicomoztoc, 129, 136; in religion, 153, 156
 Caxtollí, fifteen, derived, 103
 Ce, one, 104
 Chichi, as root, 37, 39, n.; *see* Chichimecatl
 Chichimecs, 39, n.; as "dogs," 124; with the Chalcas, 128; expelled, 144; naked, 157; came to Anahuac, 125, 133
 Chicomoztoc, seven caves, 129, 136
 Chimalpahin Quauhtlehuanitzin, born, 125; *Annals*, 111; quoted, 58, 68, 125, 169
 Chimalpopoca, author, 99, 100; chieftain burned at stake, 168
 Chinese, polysyllabic, 82; syntax, 82; phonetic decay, 83, n.; compared with Tibetan, 83
 Chippewa inflection, 84
 Cholula, 112
 Climate, 135
 Clipped forms, 46
 "Cloth country," Pantitlan, 145
 Coalescing pronouns, 60
 Coat of arms, Mexican, 133
Col, *col*-lar, Ahcoluacan, 150
 Color in race problem, 20, 118
 Compounds, 38
 Confessional, 158
 Conjugation, 62
 Connectives, 60
 Consonants, law of change, 24
 Cow, as root, 22, 26, 164
 Culture names, 144
 Cushites, 126
 Cree, syntax, 79
 Cross, pre Christian, 158
- D
- Dards, 134, n.
 Deities common to Mexico and Asia, 161
 Deluge, 118
 Dentals, 94
 Descent into hell, 156
 Desinences, 63
 Devil, as owl, 49; worshiped, 152; Tezcatlipoca, 50; described, 51, n.
 Dialects, Mexican, 67, 99
 Dictionary, new comparative, 32
 Divine brotherhood, 131
 Dog, as root word, 27; in phonology, 27; in mythology, 53
 Dual number, 106
- E
- Easter, 101, n.; Aztec, 154
 Economics of Aztecs, 166
 Eden, Nahua, 131, 163; Aryan, 137
 Education, Aztec, 165; Indian, 85, n.
 Elam, Aryan, 120
 Elbow, molictli, root, 29
 Endings, Mexican, 39, 40, 41
 Ethics, Nahua, 165
 Etiquette, Nahua, 165
 Etruscan towns, 149
 Expression, power of in primitive tongues, 75
- F
- "Fall" of man, 158
 Feather pictures, Aztec, 164
 Festivals, Aztec, 165

Finnish, permanence of, 87, n.
 Fire, kindling in Anahuac, 101;
 worship, 153
 Five, "handgrasp," 103
 Food supply, 166

G

G with *v*, in Mexican, 98; be-
 comes *j* or *s*, 99
 Galchas, 134, n.
 Gender, Mexican, 29; and New
 Persian, 67
 Geographical extension of
 Nauatl, 112
 Geographical names, Mexico-
 Asia, 149, 150
 Giants, 133; "age of giants," 137, n.
 Glyphs, Mexican, 145
 Grammatical gender, 66
 Greek, unassignable words, 18, n.
 Greek verb, mutations, 86, n.
 Gutturals, 95

H

Hand counting, 106
 Hanuman, king of monkeys,
 146, n.
 Hare, Great, 54
 Hebrew roots in Khassi, 88, n.
 Hecate, 51
 Hell, descent into, 156
 Hermit caves, 138
 High-priest, Teohuateuctli, 124
 Hindu Kush, Aryans in, 141, 142,
 143
 Home land of Nahua, 163
 Homonyms, 47
 Honorifics, 42, 165
 Horse calls, 89; sacrifice, 161, 167
 House, word for, Old World and
 New, 10; *see* Calli, 149
 Human sacrifice, 152
 Humming bird, 114, 116, 117
 Hungarian, postpositions, 61

I

Immaculate Conception, 157
 Immortality, Aryan belief, 157
 "In" as article, 65
 Incorporation, 77
 Indian languages, number of, 16,
 n.; power of expression, 75
 Individuality of languages, 71
 Indo-Iranian phonetics, 100
 Indra, as Tlaloc, 30, 166
 Infinitive, germ, Mexican, 59
 Inflection, 72, 84
 Islands in Nahua migration, 129,
 132, 143
 Izcalli, or itzcalli, the resurrec-
 tion, 154
 Iztacciuatl, mountain, 59

J

Japanese words, dog, 52; Yezo-
 jin, 152, *n.*; "earth spiders,"
 124, *n.*, 128, *n.*

K

K and *t*, equivalents, 18, *n.*, 88;
 "catúr," 89; *k* equals *t*, 95; *k*
 equals *p*, *f*, 95
 Ka, a root, 23; sign of preterit, 62
 Kafiristan, Aryan, 134
 Katur-Mabug, Chedor-Lagomar,
 121
 Khassi, 81, *n.*
 Kinship of languages, what con-
 stitutes, 11; of American, 21
 Kul, clan, 36

L

L and *r*, 44
 Labials, 97
 Languages, vitality, 24, 60; form-
 classification, 81, number in
 world, 71; Old World and New
 compared, 114, *n.*
 Latin, unassignable words, 18, *n.*

Learning, of Aztecs, 164
 "Left hand" superstition, 115
 Liaison, Lithuanian and Sanskrit, 61
Lingua rustica, 73
 Litzli, 41
 Loka pālā, world protectors, 162
 Lord's Prayer in Mexican, 70
 Lost letters, 92, 93

M

M, *n*, not sounded, 97; *m* related to *b*, *p*, 98
 Magian, derivation, 99
 Magic, Aztec tonalamatl, 159
 Man, various words for, 88
 Manabozho, the Great Hare, 116; in Menominee, 116, *n.*, 161, 162
 Manasowar, holy lake, 138
 Mandans, as Welsh, 122
 Marriage, Aztec, 159
 Matlactli, ten, thirteen forms of expression, 105
 Maya, language and culture, 111; inscriptions, 126
 Meanings, importance of, 24
 Merchant, oztomecatl, 164 and *n.* 1
 Metzli, *see* Moon, 50
 Mexica, later name of Aztecs, 54; Mexica-Chichimeca, 133
 Mexican language, place in Aryan group, 18; age, 59
 Mexico, meaning of word, 54; Tenochtitlan, 55
 Mexitli, Mexitl, as Ahura-Mazda, 54; *see* Mexico
 Migration, Nahua, cause of, 144, *n.*
 Miracles, 158
 Mirror, bad luck, 50, 51
 Missionaries, as philologists, 31
 Mithra, rites of, 156
 Molina, Nauatl lexicographer, 7
 Monkey, 52; *see* Quauh-chimalli and Ozomatli; geographical range, 146
 Monosyllabism, 82; English, 73
 Monsters or giants, 133, *n.*
 Montezuma, 168, 170, *n.*
 Moon and west wind, 116, 135; monarchs, 42, *n.*; gazelle in, 117; Tartars reverence, 117; as Artemis, 51; *see* Metzli
 Mother of the gods, 162
 Myths, moon and west wind, 116, 135; Pandora, 116, *n.*

N

Nahua Eden, 131, 163; courage, 168
 Nauatl language, easily misinterpreted, 39, *n.*, 50, *n.*, 60
 Nebo, 118
 Nine, Mexican and Sanskrit, 105
 Noah, Mexican, 119, 150; of Michoacan, 150
 Nonohualca, tribe, name derived, 136, and *n.*
 Nudity, 132, 157
 Numerals, Mexican, are Aryan, 102, 103, 104, 105
 Numeration, Mexican, 101
 Numeration and cosmogony, 107

O

Olmos, Nahuatl grammarian, 97, *n.*, 148
 Om, sacred syllable, 105, 137
 On, Mexican and Saxon, 66
 Origin of American race, 10, *n.*, 16
 Owl, Mexican devil, 49; "bad luck" bird, 49; "luminous," 50, *n.*
 Ox, root, 29; predicted birth of Zoroaster, 158
 Oxus, 136, 137, 133, 141
 Ozomatli, divine monkey, 53

P

Painted nose, 150
 Painting representing Aztlan, 129, 132, n., 143
 "Pal" and "cully," 36, 74, n.; i-*pal* nemoani, god, 118, 162
 Pamirs, 135
 Pandora, Algonquin, 116, n.
 Pantheon, Mexican, 162, n.
 Parable, Woman and Lost Coin, 68
 Parsīs, 160
 Passive voice, 42
 Paynal, man-god, 155
 Pedagogue, telpuchtlatō, 159
 Periods, in linguistic development, 84
 Persistence of language, 87
 Phonetic "sports," 89
 Phonetics: changes, 24, 88; decay, 47; Sanskrit-Tupi, 58, n.; world-wide, 96
 Photograph, "bad medicine," 51
 Pixquitl, harvest, 48
 Plural formation, Mexican, 66; of numerals, 104
 Poetry of Nezahualcoyōtl, 65
 Popocatepetl, eruption, 58, n.
 Possessive, English, 83; Mexican, 38, 40, 60; New Persian, 60
 Postpositions, 43; eastern Aryan, 61
 Pre Columbian discoveries, 121
 Prepositive object-pronoun, 56
 Priests, Aztec, 166; in teocalli of Mexico, 153, n.
 Primal curse on Aztecs, 131
 Pronunciation, "continental," 96
 Prophecies of birth of Zoroaster, 158
 Púkhtu language, 146
 Pyramids of Teotihuacan, 110; Cholula, 110

Q

Quauh-chimalli, monkey, 52
 Quechcoatl, rattlesnake, 47
 Quechtli, the neck, 47
 Quetzalcoatl, word derived, 37; contest with Tezcatlipoca, 156; taught arts, 152
 Quinehuayan, name derived, 136, 147
 Quotations, Mexican, 68

R

Religion of the Nahua, 152
 Repute and disrepute of words, 74
 Resurrection, Izcalli, 154
 "Reverencial" verb, 70, n.
 Rhythm, 74
 Root, what is? 32; onomatopoeic, 33; differentiation, 34; value compared with termination, 34, n.; kul and chichi as, 36; usual form, 26; number of, 34; primitive, 34; abolished, 34; actuality of, 84; did ignorant recognize? 85; strong forms, 93

S

S, z, ç, Mexican, 100
 Sacrament, 155
 Sacred books, teoamōxtli, 126, and n.
 Sacred numbers, seven, 139; four, 159
 Sahagun, historian, 158 ff.
 Saltillo, 99
 Saráma, dogs of, 53
 Selish verb, 81
 Serpent, of Eden, 123, n.; worship of, 152
 Seven in magic, 139
 Sheep, derived, 23
 Siméon, editor Mexican books, 7, 126

Siva, *ciuatl*, 117
 Skulls, place of, 141, and n. 3
 Slang, endurance of, 25; "old rip," 25
 Sound shifts, 93
 Sounds, forward movement, 92;
 "eastern and western," 95, 97
 "Speak," conjugated, five languages, 85
 Spelling, syllabic, 80; Mexican, arbitrary, 100
 "Stations" in Nahua migration, 142
 Superstition and conquest of Mexico, 169
 Swastika, 120, n.
 Sweat, Aryan word, 28
 Syntax, Mexican, 58; ancient and modern, 75; synthetic vs. analytic, 84

T

Tajiks, 141; 154
 Te, pronoun, 56, 62; prefix, 65
 "Tecatl" and "catl," as appellatives, 148
 Tel, terra, *tlalli*, 46
 Tenochtitlan, 55; *see* Mexico
 Teocalli, 7; of Mexico, 153 n.
 Terminations, value in comparison, 34, n.; syntactical, 39; Mexican, 40; lost in plurals and compounds, 46
 Tetzauitl, as *Uitzilopochtli*, 117; derived, 117, 161, 170, n.
 Tezcatlipoca, 50; described, 51, n.; contest with *Quetzalcoatl*, 156
 Tezcoco, Athens of Nahua culture, 109, 113
 Thought forms and style, 67
 Ti, affix, wide use of, 82
 Tibetan, phonetic decay, 83
 Tla, derived, 64
 Tlacatecolotl "man owl," 49
 Tlacochealca, tribe, 126
 Tlaloc, as Indra, 30, 166
 Tlani, homonym, 47
 Tlapallan (Balkh), 139; "old red town," 140, n.
 Tlaptli, ark, 119
 Tlascalans, envoys, 168; bravery, 169
 Toltecs, 123; came to Anahuac, 125; sacred city Teotihuacan, 136, 140; religion of, 168; character, 168
 Transfer meanings, 25; *see* *Metztli*, 50
 Trinity, 158
 Tula, Tola, 130, n., 140
 Tupi, "relatives" and "reciprocals," 57; phonetic changes, 58, n.; word for cannibal, 38; numerals, 106
 Turanian syntax, 44; compared with Mexican, 61
 Turkish language, 80, 141
 Tzin, honorific, 42
 Tzontli, as numeral, 48

U

Ualyolcatl, kindred, 48
 Uemac, Aztec chief, 130, 149
 Uichachtecatl, mount, 101, n.
 Uitzilin, *see* *Uitzilopochtli*
Uitzilopochtli war god, 114; as *Tetzauitl*, 117
Uitznauatl, god, 162
 Unit of expression, word or sentence? 34
 Unity of human speech, 86
 Unleavened bread, 155

V

V, w, parasitic, 27, 95; equals oo, 97
 Verb, Mexican, conjugation, 62

- Vicar of Uitzilopochtli, 155
 Vigesimal numeration, 101, 134
 Vocalic consonants, 96
 Vowels: mutation, 22; genesis, 24; sequence, 44; discussion of, 93; table of comparison, 94
 Vulcan, 162
- W
- Walled places, 142
 Welsh-speaking Indians, 121
 West, in Aztec ceremonials, 128, n., 159; "behind," 129, n.
 West wind, moon myth, 116, 135
 Winter solstice festival to Uitzilopochtli, 155
 Witch, Mexican word, 117
 Wolf, phonetic changes, 44; Assyrian, 45, n.
- Words, long, 34, 35; clipped in compounds, 38
 "World protectors," eight, 162
- X
- X in Mexican, sound of, 97
 Xauani, Latin, col, 48
 Xiquipilli, "bag full," 103
- Y
- Yezidis or Izedis, 152, n.
 Youalehecatl, 51; *see* Tezcatlipoca
- Z
- Zoroaster, 139; field of labors, 153; prophecy of birth, 158; miracles at birth, 158

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